

YOUR ULTIMATE GUIDE



TO HEALTH & FITNESS

BEYOND DIET[®]

By: Nutritionist Keith Klein CN CCN

IEM

INSTITUTE OF EATING MANAGEMENT

PRESENTS...

BEYOND DIET

"DON'T JUST LOSE THE WEIGHT, LOSE THE PROBLEM"

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About the Author



Keith Klein has over 25 years of experience as one of America's leading nutritionists. He was once the dietetic director at the Institute of Specialized Medicine and the Houston Sports Medicine Clinic and for many years designed and implemented the dietary protocol used in the clinics of psychiatrist Dr. John Simms. Mr. Klein has authored Weight Control for a Young America, Beyond Diet, Get Lean, as well as two cookbooks, The Healthy Chef and Kidtrition Kafe. His columns have been featured in Muscle Media, Modern Muscle, Fitness Express, Health & Fitness, and Vie. Keith was the nutrition editor for City Fitness magazine and the author and publisher of the Watchdog Newsletter. He also hosted the nationally syndicated radio program Get Fit and the local radio program Healthy Living with Keith Klein. Keith's popular television show Smart Bodies aired weekday mornings on the motivational channel TPN for several years.

Currently, Keith's time is spent writing, lecturing, hosting the Beyond Diet Podcast (www.beyonddietpodcast.com), and serving as the director and CEO of The Institute of Eating Management and Relapse Prevention Center. He is the personal nutritionist to many of America's top athletes, professional body builders, beauty pageant contestants, models, and dancers. A partial list includes: U.S. Olympic gymnasts Mary Lou Retton, Kim Zimeskal, Johnny Fisher, and Eileen Diaz; U.S. Olympic sprinters Mary Onayli and Michelle Finn; the Houston Aeros Hockey team; Ricky Sanders (Washington Redskins); golf pros Greg Chapman and Kelly Knehn; professional bodybuilders Lee Labrada (Mr. America & Mr. Universe), John "The Tank" Sherman, Craig Titus (Mr. USA), Carla Dunlap (Ms. Olympia), Victoria Gay ("Jazz" of the American Gladiators), Stoney Grimes, and Eric Otero; beauty pageant contestants Betsy Bates (Ms. America), Tatiana Anderson (Ms. Fitness USA), Deanna Clark (Ms. Houston), Angie Sisk (Ms. Texas/USA), and Jamie Marie Swenson (Ms. Oklahoma), as well as models and dancers too numerous to list. But more importantly, he works with people just like you!

Keith's passion is food and he has made it into a science. While most nutritionists are busy hawking supplements and advocating bizarre eating rituals, he is ripping apart the myths about the food industry, supplements and weight loss gimmicks that can affect you physically, emotionally, and metabolically.

The definition of self improvement is changed behavior. If that's the measure, no one can guarantee those results better than Keith Klein. Life in today's world can spawn obsessive and irregular eating habits, resulting in a reduction in wellness and an increase in weight. You will be appalled by Keith's frank and startling revelations concerning the deceptive claims made on many food packages today and how these food labels cannot be relied upon. This book is no "Doctor Diet" talk. It is a clear presentation of the facts that allows you to make choices and proposes some concrete solutions on which you can act.

Introduction

I have been involved with the media for several years. As a writer for various magazines and a television and radio talk show host, I have learned a thing or two about the media. Like it or not, the media is the pipeline through which most of us learn about the world around us. It is the conduit carrying the information we rely upon to shape our ideas and form our opinions. Anyone writing articles or appearing on radio or television is automatically viewed as an expert regardless of how truthful or accurate their message. After all, what magazine or radio station would allow you to be out there if you weren't an expert? Honestly, to get out there all you really need are a few connections and a bit of controversy. The media loves that. It also helps to have a different hook that goes against the current trend. Magazines are starving for good writers. One of the magazines I've written for had one person writing the majority of articles and using a different pen name for each article. That's not the way it works in all magazines, but the fact is we are easily manipulated because we place too much trust in the media. So, how do you decipher between facts and opinions? It's almost impossible isn't it? A lot of the nutrition information that you have been taught over the years is simply wrong. I've watched the media grab onto dietary topics and distort the facts. Maybe you have heard that alcohol can reduce your risk of heart disease and you swallowed it hook line and sinker. Maybe you read in the paper or saw on the local news that aspartame causes brain cancer and because of that you stopped using it. I have spent my career trying to reeducate the public to understand that some of the information we have been told needs to be questioned. Honestly, I believe that many people who have tried to lose weight in the past did not fail, but rather the information they were given failed them. For the last twenty-five years, I have been studying human eating behavior by discussing issues dealing with food, health, weight, and body image with hundreds of clients. Over the years, I have learned valuable information from each person. In turn, I have shared what I have learned through my radio shows, published articles, and books in order to help others avoid the mistakes that several generations of dieters have made. Whatever you do, don't just accept whatever you read as fact. Having written columns for various magazines for several years, I am fully aware that a lot of the information in a magazine is designed to sell something. Consider for a moment that most muscle magazines are owned by major supplement companies and you will soon realize just how difficult it would be to get accurate information about certain supplements. To top that, most personal trainers get their information from these magazines and then pass that information along to their clients. Weider owns Muscle and Fitness, Shape, Men's Fitness, Flex and Prime. EAS owns Muscle Media. Twin lab owns Muscular Development. The list goes on and on. Common sense tells us that if a company sells a certain supplement and owns a magazine, the information within that magazine will be slanted to support the sale of their products. That's not necessarily always bad; but it does mean that you should consider the source and do a little research before jumping on the latest bandwagon. Would it surprise you to learn that some of the things most people think they should do in order to lose weight and become healthy are often the very things that cause them to fail and become heavier? With each new attempt to lose weight, they are faced with more feelings of failure and frustration. Ultimately, a sense of hopelessness sets in. They turn inward and begin wondering, "What's wrong with me?" or "Why can't I do this?" or "Why don't I have any discipline?" or "Why can't I have more willpower?" Sound familiar? The truth is, nothing is inherently wrong with you. You simply lack the ability to understand your high risk situations and the effects certain situations have on your ability to succeed. The two biggest high risk situations are simply letting yourself get hungry and not carrying food with you. If you want to be successful, it all begins with identifying your high risk situations and implementing the right coping skills to overcome them. I've put this information together to help prevent you from falling into the same old dieter's mentality. It's my hope that this information will share my vision that dieting should not be painful or consist of an odd combination of foods; it should not cause the dieter to feel deprived. The fact is I think that every client I see should love the way they are eating so much they don't want to go off of their program. That's right, it's your job to see to it that you really enjoy the foods you eat and are genuinely satisfied by each meal. The goal should not be to center your attention on how fast you can drop unwanted pounds, but rather, you should be focused on developing an eating plan that is truly enjoyable and that you can do for life.

You may disagree with some of the information written on the following pages and that's okay. You see, it's not my goal to make you agree with everything that I believe. My goal is to stimulate free thinking and open the road for constructive dialogue that breaks away from traditional thinking and creates new concepts that can really

help people. In addition, I hope that you will learn to question any future dietary information that the media oversensationalizes. Most of the information that you receive from the mainstream media consists of press releases that were written by a publicist to slant their clients' information so that the media will be interested in running their story. What I try to do whenever I write about a topic is to balance the information in such a way that you will be able to draw your own conclusions. Unfortunately, the news media today has become more like a tabloid journal. Let's face it, the local health beat reporter has a mere fifteen seconds to cover the latest nutritional topic for the day; therefore, that reporter can't possibly spend the proper amount of time it would take to give you all of the important details. You will become enlightened to the fact that some of the information we read is written by those with a vested interest. Of course there is some great information out there, but we could all use a little help separating the opinions from the facts.

If you thought that the new label laws would straighten out the misrepresentations and consumer fraud, think again. You will see that our government has its own priorities and chooses to protect the livestock and dairy industries. In addition, many of the decisions are shaped by strong lobby groups. Consequently, the very entities that make the rules, regulations, and laws have a vested interest preventing them from making the best decisions for the health of our society. Also, please keep in mind that my writing is also an expression of my own opinions.



Its No Wonder Americans are So Confused About Weight Loss!

The Yo-Yo Syndrome

Have you ever wondered why Americans are so confused about the right way to lose weight? Trends regarding health and weight loss seem to change as often as the weather. It's rather funny to watch the various things people will do in an effort to lose weight. Just slap on some thigh cream and watch the fat

disappear! Come on, we have to be smarter than that? But why then are shoddy infomercial equipment sales in the billions? I've contended for years that the approaches dieters use in a quest to drop body fat are often the very things that make matters worse. The constant struggle to lose weight is a perfect example. Most people believe that in order to lose weight they should omit all of their favorite foods, never eat out again, and follow bizarre eating rituals that leave them starved, depressed and feeling miserable. As they incorporate these misguided strategies, they do great for a few weeks and then suddenly they face an uncontrollable urge to eat anything and everything they can get their hands on. They are then left feeling guilt-ridden and weak because they have failed once again. But in reality, they didn't fail at all. The dietary approach that was implemented actually failed them.

I'm sure that you have heard about the Yo-Yo Syndrome before. It's nothing more than the act of losing weight and regaining it again and again. Although everyone seems to know what the Yo-Yo Syndrome is, I don't think that most understand the negative impact that repeated dieting episodes have on the body and the mind. It's not enough to simply know that dieting can slow down your metabolic rate. You have to understand that the end result of strict dieting will always make you fatter. Imagine that we lived in a world governed by the following rule: no matter how much money you made or how hard you worked to get it, every penny would have to be turned over to the government. If the purpose and motivation for working hard is to make more money, do you think many people would want to work if all the reward for their efforts was taken away? Similarly, how many people would start a bizarre diet to lose weight if they understood that the same diet would ultimately make them fatter?

The main reason that anyone begins a diet in the first place is to lose body fat. But by following too strict of a diet you may actually end up fatter. As odd as this may sound, eating more as opposed to less may actually create a better, healthier weight loss. It's true that you have to shave back your calories to a certain degree; but cutting them back too far causes all kinds of problems. When you cut calories in order to lose weight, the first high risk situation you encounter will be hunger. Hunger is a very strong driving force. Once it sets in, even the thickest steel locks won't stop you from tearing open the cupboard doors. Faced with hunger, control vanishes and bingeing is the result.

Dieting harshly results in muscle loss. Muscle is a storehouse of nutrients. Inside each nutrient dense muscle fiber are vitamins, minerals, amino acids, water, and electrolytes. When you don't ingest enough of these, the body will dip into the muscle to provide them with the fuel you need throughout the day. When you slash your calories below 1000 per day and drop your protein too low, a major loss of muscle will occur. In fact, when your caloric intake is too low, as much as four to five pounds out of every 10 pounds of body weight that you lose can come from muscle instead of fat. More muscle contributes to a faster metabolism. Likewise, less muscle means a slower one; therefore, if you lose muscle your metabolic rate slows down.

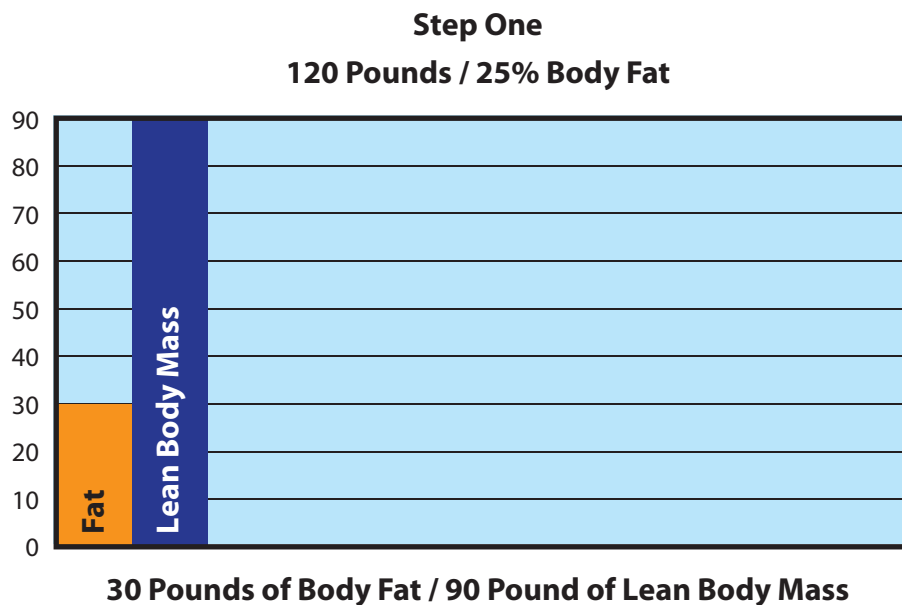
Now here's the real shocker. Exercising while under eating, will actually cause you to lose more muscle. Dieters think that exercise will keep muscle regardless of how they eat. Consider this: if your body requires 1200 calories

per day for metabolic needs and you only eat 900 calories, in order to make up for the lack of nutrients your body will have to dip into muscle to get what it needs. Now, let's add a little twist. If you add exercise, which requires more fuel and nutrients, where will your body get what it requires if you are not ingesting enough food? While muscle is nutrient dense, fat is not. Fat is a source of fuel, but contains no amino acids, very little water, and no minerals. As a person eats fewer calories and exercises more, the body will not have enough fuel to dispense between the exercise requirements and your daily needs. The body is now forced to slow down the metabolic rate to conserve what little fuel and nutrients are available.

To make an even bigger impact, let's take a "real world" look at what happens to you if you slash your calories, skip meals, and diet harshly in an attempt to lose weight. Sound familiar?

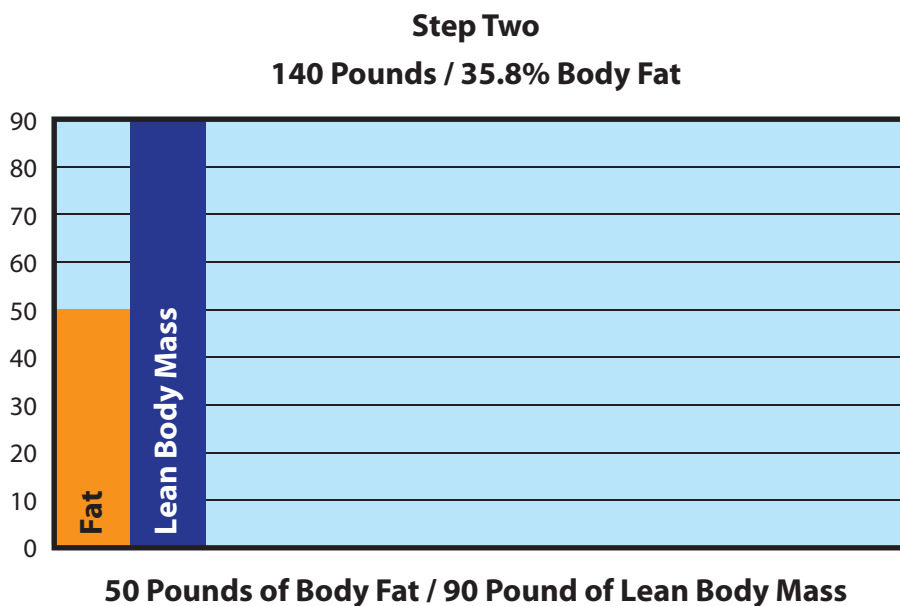
STEP 1

Pretend that you weigh 120 pounds and your body fat is currently at a respectable 25%. You look and feel fine.

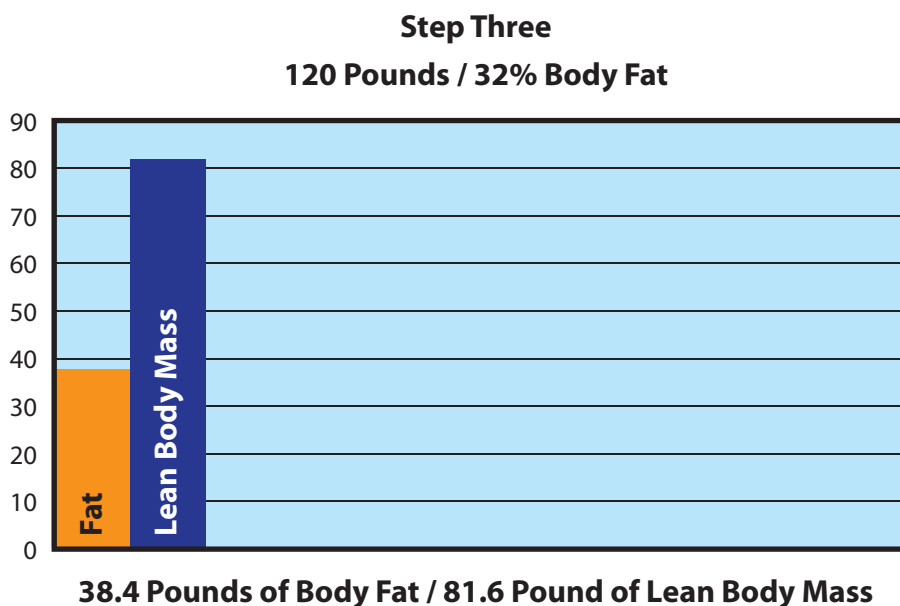


STEP 2

You over-indulge and gain 20 pounds of fat during the holiday season. As expected, your body composition changes. You now weigh 140 pounds and your body composition has increased to 35.8% fat. With the additional weight, you become unhappy and the whole holiday mood is ruined.

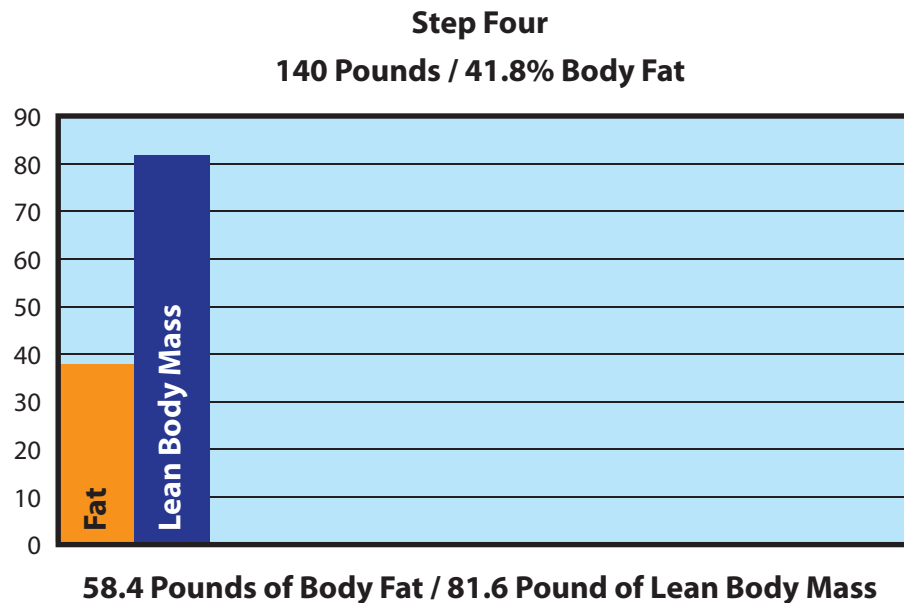
**STEP 3**

Feeling panic, you decide to shed the weight any way you can. So you diet harshly, eat less than 900 calories a day, and skip breakfast. You eat nothing but salads and cabbage. But the 20 pounds you are about to lose won't be the same 20 pounds you gained. The original 20 pounds you gained was pure fat. While dieting so strictly, and by not eating enough protein, you will lose some fat and some muscle. You now weigh 120 pounds but your percentage of fat is no longer 25%, it's now 32%. In other words, you just got fatter.

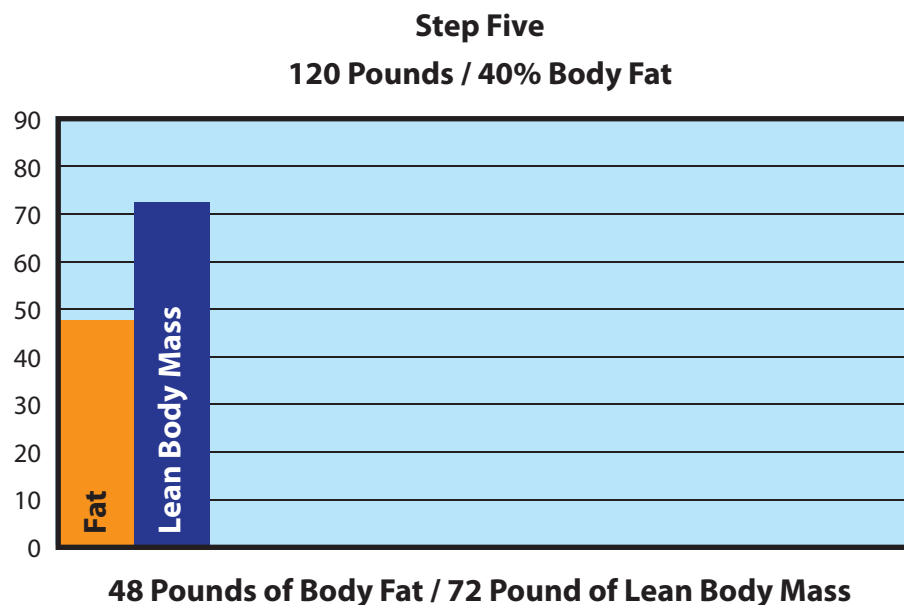


STEP 4

Since you weren't on a quest to make lifestyle changes, and you now weigh 120 again, you go "off your diet" and return to your old eating habits that caused the problem in the first place. And because your diet was so strict, you start bingeing on your favorite foods that you had omitted. Now that you are out of control with your eating again, you gain back the 20 pounds of fat that you lost. Unfortunately, the 20 pounds that you just gained are added on top of the fat that you kept from the previous diet. The 20-pound weight gain is in the form of fat, no muscle was added, and so you just became even fatter. You now weigh 140 pounds again but your percentage of fat has climbed to 41.8%.

**STEP 5**

You can see you are getting fatter and fatter with each subsequent diet. If you were to repeat this pattern over time, and if you could get back down to 120 pounds, you would be about 40% fat.



There's no easy way to talk about this, so let's be blunt. After several years of crazy dieting, you will experience difficulty even reaching 120 pounds again. As the years pass, your weight continues to climb. Here are several problems that will now prevent you from ever returning to your original bodyweight or reaching long term success:

1. *First, everything that you did in your attempt to lose weight was self-defeating. Since you lost so much muscle, your metabolic rate slowed down to the speed of a snail. Now, if you ate the same number of calories that you did when you weighed 120 pounds, you'll gain about 5-10 pounds every year thereafter. So why does your metabolic rate slow down when you cut calories below a certain level? Humans evolved under the constant threat of famine. Consequently, our bodies have learned to respond to a reduction in calories as a natural defense mechanism against starvation. When your body is deprived of food for a certain length of time, it adjusts itself by lowering the metabolic rate in order to conserve what little nutrients and calories it does receive.*

Unfortunately, your body cannot tell the difference between being lost on a desert island and starving, or sitting in a chair at home and purposely withholding food. It can only judge the circumstances based upon how much and how frequently you eat. After a few weeks of strict dieting, your body goes into a state of protective alert. In order to prevent starvation, your basal metabolic rate (the rate at which your body burns calories when at rest) begins to decline. In addition, your body uses muscle as fuel in an effort to preserve fat. Your muscle will provide the vitamins, minerals, amino acids, and water that your diet does not. In other words, your body decides that muscle is expendable and fat is not. Both of these changes result in the body burning fewer and fewer calories, thereby making it more and more difficult for your body to lose weight.

2. *Second, the appearance of your body is not the same as before. When you reach your goal weight by using poor dieting techniques, you still may not fit into your clothes properly. This is due to the fact that each time you reached your goal weight you acquired more body fat than the time before. When looking in the mirror you may find your body composition has changed so much over the years that you don't like your reflection despite of the fact that you reached your goal weight. Maybe you see a thin fat person. So, in an attempt to look the same as you did before, you began dieting again. Thus, the dieting pattern keeps rolling and the whole process becomes a vicious cycle.*
3. *Third, a problem revolves around your misconceptions concerning dieting. You see, in your mind each time you dieted it appeared to work. Because of your emphasis on the scale and because your weight did indeed drop, you are under the impression that your method of harsh caloric restrictions and skipping meals works. This essentially closes the door on long term-success. By the time you reach your late forties or early fifties, the damage from years of dieting will be difficult to correct, both physically and mentally.*
4. *Another roadblock: bingeing episodes. These continue even after you have regained your weight. Mentally, the cravings for sweets and other foods continue for months to come. Unable to control your intense cravings and bingeing, your weight is destined to fluctuate and get worse. These problems are a direct result of the self-imposed starvation, rigid deprivation, and harsh guidelines. Destined to repeat another dieting episode similar to the one described, you end up complicating your weight problem with psychological problems toward food. Now you mumble phrases like "Can I have some cake with whipped cream?" for no apparent reason.*
5. *Here's another problem: since you have met with failure each and every time you tried to lose weight, you begin to develop negative self-expectancies and you learn that any attempt at weight loss is a waste of your time. Consequently, you may eventually give up trying completely, admit defeat, and resolve yourself to a lifetime of obesity. And if you don't give up, you become one of the millions of hope-seekers that constantly search for that elusive magic bullet to help you lose weight. You become one of the hordes of people responsible for making the weight loss industry a billion dollar a year profit-making business.*
6. *Depending on your age, more serious problems with food can emerge. After years of trying to lose weight, you may decide that the only way to control your weight is by not eating at all, so you slowly begin exerting control over everything you eat. As time progresses, you become obsessed with food and exercise. Everyone sees you losing*

weight and rewards you with compliments. So you forge ahead with determination. Soon, friends and family members notice that you're getting a little too thin. But you think you are looking great. Now you exhibit anorexic tendencies and a lifetime of new battles with food begins. It's not just anorexia that could develop, but other problems as well. Maybe you appear perfectly normal to everyone else. You have lost your weight and appear to be keeping it off. But unknown to your friends, family, and work cohorts, you have a deep, dark secret that you are very ashamed of. It's called bulimia. You find that you can eat normally for a few days or weeks, and then suddenly, you binge on excessive amounts of food and then throw-up or use laxatives to purge yourself of the excess fat and calories. Or you don't throw up or use laxatives, but you suffer with recurrent bouts of binge eating and starving to achieve a stable weight. And you wonder what is wrong with you, why you can't just eat a normal portion of food. You spend your time worrying and obsessing about food and weight and body image. Believe it or not, these tendencies all started because of your desire to lose weight.

As you can see from the list of examples, several years of yo-yo dieting will make it difficult for you to reach and maintain a reasonable body weight. Your weight continues to climb as the years pass. By the time you consult a professional, you may have developed a distorted viewpoint concerning food, body image, and dieting. Could the failure rates of dieting be so high because the technique most people implement to lose weight is fundamentally flawed from the beginning? Doesn't it make more sense to eat frequently, avoid hunger and be on a program you can do for life? As long as people press for immediate gratification and think weight has to be shed as quickly as possible, there's virtually little hope that they will ever succeed. Dieting is negative, restrictive, painful, and to be honest, usually temporary. The longer you continue to engage in unsound dieting practices, the more probable it is that you'll become next year's Yo-Yo Syndrome poster child.

But fear not, there is hope. Regardless of how unsuccessful you have been in the past at weight loss, I have a solution. To effectively help you lose weight, you want to keep your muscle so that your metabolic rate remains high. To be successful you have to eat food. Exercise and eating correctly both play pivotal roles in increasing your muscle mass, energy, and metabolic rate. To lose weight you have to avoid hunger, and to do that you have to use food. As you can see, a better approach to losing weight is to eat, not starve. Wow! What a revelation! Since dieting causes serious problems that run much deeper than many realize, don't diet! Let me remind you of one more thing. While the word diet really means "food and drink regularly eaten or consumed," it has come to mean a restriction of food and drink, which is a temporary state that you "go on" only to "go off" when you are finished. I prefer the concept of an eating program, food plan, or life plan for eating – eating for life! How does that sound to you? Let me show you how to develop an eating program that you will enjoy so much that you won't want to go "off." First, however, let me show you a few more ways that dieters stop themselves.



No Weigh!

The Yo-Yo Syndrome explains how repeated dieting can keep a person wrapped up in a perpetual state of weight gain. But it's not just strict dieting that poses problems. Frequent weighing also feeds the compulsive tendencies that prevent a person from losing weight. Furthermore, frequent weighing tends to distort your body image.

Imagine this for a moment: What if each time you ran into me, I belittled you. I told you that you were not any good or that you didn't measure up and insinuated that you were a failure. How many times would you come to visit me if I treated you that way? Imagine that for some strange reason you felt a constant need to seek my approval. No matter how many times you showed up on my doorstep, I always insulted you, called you names, and laughed at you. Yet, like a little puppy seeking approval,

you just wouldn't give up. Months turn into years, and years turn into decades. Still, you continue to show up with the hope that one day I will tell you what you want to hear. Oh yeah, there were a few times that I was in a good mood and I stroked your ego and commented on how nice you looked. But for the most part, all you've ever gotten from me are negative comments that were intended to hurt you and crush your self-esteem.

The fact is, I am not treating you that way but the scale does. Yet, some of you hop up on it first thing every morning. Some of you have to visit it two, three, or even four times a day. And like a bad parent, it's always there to criticize and belittle you. How many more years are you going to engage in the ritual of hopping on it just to have it yell out "one at a time, please?" What did you think was going to happen in a mere eight hours while you slept? Did you think some magic Hoover vacuum machine would sweep down in the middle of the night to suck away all of your fat? Imagine looking at yourself in a mirror before bed, then waking up the next morning and running to the mirror to see how much your hair grew. Would you be able to see any difference?

How many times have you felt great about your eating and exercise programs only to jump on a scale and discover a two-pound weight gain instead of the three-pound weight loss that you were expecting? Weighing frequently tends to feed the compulsive tendencies that you want to cure. Weighing often causes you to make unnecessary adjustments to your eating program. If you see a slight increase in your weight after reducing your calories, you will more than likely decrease your food intake even more. The decrease in food will lead to cravings which then will lead to strong preoccupations with food. Within a few short weeks, you end up bingeing, gaining weight, and feeling like a failure. Or you may decide to exercise more and more until you reach the point of over-exercising. As you can see, the scale can lead to poor judgment.

Most eating disorders are strongly linked to the scale. In fact, one criterion used to determine whether a person has an eating disorder is how often they weigh themselves. Weighing frequently indicates how strongly the person is preoccupied with body image. Unfortunately, the scale does not accurately indicate how well a person is progressing toward their goal. If anything, the scale and frequent weighing clouds a person's perspective and makes it difficult to assess his or her physique objectively. Face it! If you are trying to lose weight and the scale isn't going down fast enough, you are going to feel frustrated and angry even if you find yourself fitting into smaller clothes. If the scale doesn't tell you what you want to hear, all of your success becomes insignificant.

The scale can also lead to a dichotomous viewpoint of your self-image. A dichotomous viewpoint is a strong, two-sided mutually exclusive viewpoint concerning a particular topic or opinion resulting in an "all or nothing" attitude.

For dichotomous people, there is no “gray area.” Only “black or white” reasoning exists and they can rarely accept a different viewpoint. In many cases, this type of reasoning causes people to over-generalize problems. Only failures seem to matter; successes are minimized or don’t count. People that use this type of reasoning usually measure their self-worth by errors and weaknesses rather than strengths and successes. Constant weighing continually gives feedback leading to defeating, negative “self talk.” Dichotomous people will forget about any progress that has been made. All past accomplishments become worthless compared to the magnitude of one slight increase on the scale. Frequent weighers become engrossed in dichotomous thinking; swinging from one end to the other, unable to settle in the middle like a steel ball oscillating on a pendulum. They seem to swing from a positive emotional state when the scale goes down, to a negative emotional state when it goes up. This behavior and feedback can also be a trigger for bingeing. If the scale doesn’t respond the way they expect it to, they may decide that exercise and eating correctly aren’t worth the sacrifice. Frequent weighing can be the first of a series of dominoes that begin to fall eventually leading to a person’s failure.

Consider the normal body fluctuations that do, and should occur every day. Because the human body is constantly in a state of flux, no one’s weight ever remains constant. The lean body mass fluctuates up or down by one to five pounds on any given day! And these fluctuations have nothing to do with body fat, but have more to do with other variables like body water. Like the ocean, body water moves up and down throughout the day. The menstrual cycle, amount of water that you drink, dehydration due to a heavy work out, and time of day would all contribute to variations in your body water. In addition, the weight of the clothes you wear, the amount of food in your stomach, and certain medications can all affect the reading on the scale. Consequently, you can’t be sure of how much progress you are actually making by stepping on a scale.

Now I know what you are thinking. “But Keith, I weigh every morning, butt- naked, on the same scale. Isn’t that accurate?” The answer is, not really. You see, the food that you ate from the night before could still be in your intestines and the weight of that food could mask any weight loss. Once again, weighing every day is equal to looking in the mirror every morning to see how much longer your hair grew. It’s really hard to see a difference. Yet, many people weigh two, three and even four times a day expecting to get a feel for how well their diet is working. Weighing that often is absolutely the most useless thing anyone can do in an effort to determine how well their program is working.

Does this mean a person should never weigh? Not necessarily. The scale can be used to mark and chart your progress; however, it should not be the sole indicator of how well you are doing. And when you do weigh, be sure to use the scale as a motivational tool instead of a way of judging yourself. For example, if you weighed 163 pounds and your goal weight was 130, it might be disappointing to hear that you have 33 pounds to lose. I like to use the scale as a motivational tool and help guide my clients to a more positive way of thinking. For example, if you weighed 163 pounds, I would tell you that you are only a few pounds away from being in the 150’s. And once you reach the 150’s, you are only 8 or 9 pounds away from being in the 140’s. Always remember that your viewpoint is the most valuable thing you can shape to help you reach your goals. Don’t focus on what you are giving up, but rather focus on what you are gaining. If you are really serious about experiencing long-term weight loss, move your scale out of the bathroom and into the dumpster. Instead of weighing yourself every day, consider a few other ways of measuring your progress.

Ways to Measure Progress

1. *Use a body composition. It is a much better way to determine how your body is changing. Just be sure to stick with the same technician and the same formula. There are almost thirty different methods of determining body composition. All thirty can yield different results. A body composition yields a relative measurement from one time to the next, so the comparison is important.*
2. *You are making progress if you find yourself making better food selections, even if those choices are not considered "perfect."*
3. *You are making progress if you find yourself maintaining your weight during a time when you would normally gain weight. If you normally gain ten pounds during the holiday season, but this time you only gain two pounds, you are doing better.*
4. *Your goal should be to make progress. So don't attempt to follow the "perfect diet perfectly." Remember there is no "perfect."*
5. *Remember that developing a healthy body is similar to being on a journey. Like all journeys there will be bumps in the road, yellow lights, stop signs, and detours. Accept the fact that holidays, weddings, celebrations, vacations and many events are part of normal life. Just do the best you can and don't stress out over these speed bumps on the road of life.*
6. *Rather than focusing on what you did wrong, focus on what you are doing right.*
7. *You are making progress if you feel less guilt over eating so-called "forbidden foods." In other words, if you no longer want to stab yourself in the forehead with a fork because you ate a "bad food," I would say you are making progress.*
8. *You are doing better if you have learned to manage your favorite foods as opposed to omitting them.*
9. *You are making progress if your focus is on how well you are managing your food, not on how much you weigh or how fast you are losing weight.*
10. *You are doing better if your focus has shifted to developing an eating program that you enjoy and want to stay on the rest of your life, as opposed to being on a "diet."*
11. *You are doing great when you get rid of the "dieter's mentality" and replace it with a state of mind which allows for mistakes.*
12. *And finally, you are making progress when the scale no longer affects you emotionally!*



Hazardous Waist

If you are the kind of guy that has cases of Billy Beer in your basement, don't even bother reading this section. If, on the other hand, you look at the floor and can't see your shoes and that bothers you, read onward. While working with overweight subjects I noted that many of them possessed very large protruding stomachs. In the beginning, I assumed it was from an excess accumulation of fat around their midsection and if they dieted and exercised properly it would go away. As time passed, I became increasingly frustrated. No matter how much weight they lost, and regardless of how hard they exercised, their mid-sections never seemed to change. Some of these clients had very skinny arms and

virtually no fat on their legs; yet their mid-sections looked like a gigantic balloon that had been inflated beneath their skin. During that period, I used a tape measure and scale to monitor their progress. That was about 20 years ago. Eventually, instead of using a tape measure I began to use skin calipers. Then something strange happened. The skin fold method that I used required that three sites be measured around the abdominal section. I began to realize that many patients with large protruding stomachs didn't really have as much fat around their mid-sections as it appeared. The caliper readings from their waists equaled that of much thinner people; yet their stomachs hung out so far it made them appear more obese than they actually were.

Several years later, when I began working with bodybuilders and power lifters this same problem surfaced. A power lifter would come into my office looking very heavily muscled everywhere except his mid-section. I was shocked to see the mid-sections of athletic people resembling the mid-sections of the obese. It wasn't unusual to see a power lifter sporting a six-pack of abdominals with a 38-40 inch waist. When I took caliper readings around their mid-sections, the numbers would be very low, yet their bellies stuck straight out. Furthermore, when I pushed on their abdominal wall, their stomachs were hard as a rock. When they dieted down, the protrusion remained, even though they had a low percentage in their body fat measurement. It wasn't just the power lifters that had this problem. I began to see more and more bodybuilders exhibiting this same dilemma.

With all my clients, the first thing I do is record their current eating patterns. This allows me to analyze the problem areas and to gain an understanding of where they are with their current knowledge of nutrition. Then I record their body fat. After several years of collecting data on each person's eating habits and skin folds, one correlation between the obese subjects and the power lifters began to emerge. They both ate large quantities of food late at night, usually high in fat and typically right before bed. The pattern seemed to be the same in almost every instance. On the one hand, the person either skipped meals and ingested a very large amount of food at dinner or would ingest large amounts of high fat food at every meal.

What is commonly referred to as a pot belly is actually abdominal distension. Abdominal distension is caused by over-loading your intestinal system with large volumes of food, then sitting down or lying down, thereby allowing the stomach muscles to relax. When repeated often, this process will lead to a permanent protrusion that is almost impossible to change. (Notice that I said "almost.") Just think about the truck driver that drives for long hours and then finally pulls into the greasy spoon diner. He crams down a large fatty meal like chicken fried steak, mashed potatoes with gravy, butter covered veggies and follows it with a piece of apple pie. Then, off he goes into the wild blue yonder sitting for several hours while his belly relaxes on his lap.

Many power lifters or bodybuilders create their abdominal distention by simply overeating in an attempt to gain weight. Heavy late night meals coupled with high calorie meals during the day almost always leads to abdominal

distension. And it's not just men that develop distensions. Women can get them just as easily. The degree to which a person experiences this distension depends on several factors.

In the case of the weightlifters, there seems to be another element playing a role in the girth of their mid-sections. It's called heavy squatting. To make matters worse, squatting following a heavy meal seems to play an equal role in how big the pot belly becomes. Imagine a weight lifter eating a high fat lunch or dinner, then a few short hours later loading up the squat bar. The internal force and pressure created by the heavy meal in the intestinal tract, coupled with the force and pressure of the squat, shoves the abdominal cavity outward causing the distension. Squatting is not the only exercise that contributes to this condition. Any heavy exercise performed after a large meal can lead to distention particularly if done while holding your breath.

The third component responsible for the abdominal distension is visceral fat. Visceral fat accumulates around the internal organs, in this case around the intestines, and causes the internal space to increase in size. As the internal fat deposits increase, so does the internal space needed to house the extra fat. During autopsies, researchers note an abnormally large amount of fat accumulating around all organs of obese subjects. As the fat cells located on the external portion of the body become filled, the body will begin storing fat internally as well. This explains why very obese people appear to possess an abnormally large amount of lean body mass when measured for body composition. On the one hand, they do have more muscle. After all, how else would they be able to carry all the excess weight? Their bodies respond to the extra weight by increasing muscle mass. Just look at an obese person's calves: they're usually huge! While some of the increased lean body mass is muscle, most of it is internal fat which is impossible to measure with calipers. The tendency for some people to store large amounts of fat around their internal organs appears to be genetic.

Another aspect that contributes to abdominal distension is the use of anabolic steroids. A frequent comment made by bodybuilders once they quit using steroids is how much smaller their waistlines become. A steroid user will generally notice a drop in waist girth about six months after cessation of the drugs. Why? Steroids exert their effect in two different ways. First, steroids are somewhat indiscriminate; they don't just make your biceps bigger. Organs are muscles too. Steroids exert a similar, growth promoting effect on your heart, stomach, intestines, etc. How much, what kind, and how long a person uses the steroids determines the extent of the distension they may experience. When a bodybuilder quits using the anabolic steroids, he notices that his muscles lose their fullness, his strength goes down, and the pump he once furnished while blow-drying his hair also fades. In addition, just as the glory muscles diminish in size upon the cessation of steroids, the internal organs will also decrease in size. There has been some suggestion that steroids may also contribute to a greater amount of visceral fat accumulating around the organs. To my knowledge, no study has ever been done to prove this, yet it does make sense. Just look at the protruding bellies that grace the Mr. Olympia stage.

Now that I've explained what abdominal distention is, let's look at what can be done to get rid of it. The first thing you should do is adjust your dietary program. Try eating evenly balanced, smaller meals spread throughout the day and keep each meal low in fat. Avoid eating large quantities of food late at night. If your last meal tends to be high in fat and calories, adjust it by lowering the fat and pull back on the carbohydrates.

Pay attention to your posture. In most cases the pot belly is a lazy stomach. The person has simply allowed the stomach wall to relax and has never bothered to hold it in and stand upright. Think about it, anyone with a flat stomach can relax their stomach enough to look pregnant. Many people that have protruding stomachs also have weak lower back muscles and are subject to more back injuries and chronic pain due to their poor posture. As the stomach wall pulls forward, the lower back gets pulled inward as well. To compensate, the person usually tends to roll their shoulders forward. This poor posture leads to more strain on the lower back.

Don't eat a meal and go directly to the gym. Give your food time to digest before working out. Remember to breathe during each exercise. This is particularly important when squatting, doing leg presses, and bent over rows. Focus on abdominal work as well as hyperextensions for your lower back. These will improve your posture. And of course, pay closer attention to standing-up straight.

Once you have a distended abdominal cavity you'll always have a wider girth than everyone else. You may be able to lose some size in your mid-section, but don't set unrealistic expectations and think you'll have a really flat stomach. Perhaps the most important thing you can do is prevent it from happening in the first place. Avoid the mega calorie approach to gaining weight.

Finally, if you suffer from abdominal distention, you will need to focus on more aerobic activity. If you are really serious about getting rid of your midsection, you have to build-up to an aerobic program that consists of five sessions a week and lasts for at least 45 minutes. The increased aerobics is the only way that I know of to get rid of the internal fat that is stored around your intestines. In fact, if you can eventually build up to a slow jog, five days a week, you will be amazed at how many inches will drop from your waist line.



Learning What Works and What Doesn't!

Coping Skills

Successfully dropping body fat, gaining muscle, and improving performance requires more than a simple knowledge about food, supplements, and working out. Those things are important, but you also have to know something about coping skills. Coping skills are precise, clearly understood sets of rules that one must implement in order to achieve a certain goal. Whenever I lecture about nutrition, I stress the importance of coping skills. People usually respond in one of three ways. One response is a blank stare. These people never get the point of the discussion. Basically, it flies right over their heads. Others hear the examples but do not fully understand the importance of implementing

these skills. Finally, you have the people that hear and seem to understand the concept, but choose not to accept it. Their responses are usually "I'm too busy," "I don't have time for that," or "I don't have the willpower or discipline." Unfortunately, many people overlook the importance of coping skills and therefore set themselves up for failure right from the start. How many of you struggle every day because you have never been taught these simple skills or simply fail to implement them? Let me use myself as an example of how important it is to understand and implement coping skills.

For the last twenty-five years, I have carried food with me to work. Last year, I finally traded in my Batman & Robin lunch kit for a new cooler. Perhaps after 40 years of being picked on by Günter, I finally decided my lunch pail drew too much attention from the other guys. Early on, I discovered that in order to accomplish my goals for the day, a cooler was a necessity. Every day I take two breaks during which I eat and return phone calls. One break is from 12:30-1:00 and the other is from 3:30-4:00. Eating takes five minutes and returning phone calls take twenty-five minutes. Now, look at an example of what happened when I failed to implement my basic coping skill, my cooler:

One day while rushing out of the house, I forgot my cooler of food. When I opened the trunk of my car and realized my oversight, I knew I was in for a rough day. When 12:30 arrived, I was hungry. I ran downstairs to the deli on the first floor of my building. Because this particular deli doesn't serve low fat food, I had to make a "better bad choice." By the time I finished standing in line, paying for the food, and eating, it was 1:00. I ran back to my office and my next client was waiting. Therefore, I didn't have time to return any calls. Now my stress level just went up.

The next problem I encountered was hunger. The food I ate at lunch didn't satisfy me for very long. After about one and a half hours, I began to get really hungry. By 3:30, I was starving. Once again, I ran down to the deli with the intention of ordering the same meal. Unfortunately, I began to justify and rationalize eating other things. So I grabbed a bag of pretzels and a banana to go with the sandwich and baked potato. Once again, I finished eating and got back to my office just in time for my next appointment. As soon as I walked in the door, my 4:00 appointment was standing there waiting for me. Guess what? I didn't get to return a single call and now I had twice as many to return!

When 6:00 finally arrived, I couldn't leave. After all, I had a bunch of calls that needed to be returned. After an hour and a half on the phone, I finally left my office. Feeling stressed out, hungry, and tired, I began to justify and rationalize once again. I convinced myself that I could skip my workout and make it up later in the week. Feeling pressed for time, I stopped at a local restaurant and ordered a chicken breast and baked potato. When I arrived home, I realized things were not any better. I normally write for two hours each evening to prepare for my radio

show, television show, and a newsletter. In addition, I have to submit articles to four different magazines every month. Under normal circumstances, I enjoy my writing time. However, on this particular evening, I dreaded it. I was tired, frustrated and way behind schedule. My day became a series of dominoes that began to fall because one coping strategy (my cooler) wasn't in place.

1. *My diet fell apart.*
2. *My energy suffered.*
3. *Cravings for other foods surfaced.*
4. *I missed my workout.*
5. *My stress level increased.*

Result: *I didn't feel that I had an ounce of free time the entire day; my day was consumed with work and finding food.*

All too often people become entrenched in their stressful lifestyle. They believe that the trench they have dug for themselves seems like the best way and view change as adding more stress. For example, many people use the excuse that they don't have time to cook and carry food with them. They view this as a hassle. Let me tell you first hand, I don't have time not to cook. By spending a few minutes each morning putting together my cooler, I open up lots of free time during my day. By having my cooler, I make it to the gym, get off work on time, have tons of energy, rarely crave other foods, and see the best possible results.

You are probably thinking that you cannot take two or three meal breaks during your workday because the boss won't allow it. Well, get creative! When I worked at the Institute of Specialized Medicine, the patient load was so heavy that the head doctor wouldn't allow me to eat whenever I wanted. All of us received an hour lunch break every day. I proposed a different strategy. Instead of taking the full hour off, I asked him if I could take three fifteen minute breaks (for a total of 45 minutes a day) and work right through the normal lunch break. He didn't even balk. I got what I needed while he got an extra 15 minutes of work out of me every day. Now, with the numerous meal replacement powders available, getting in a quick meal has never been easier. If taking the time to mix these powders at work is a hassle or if you don't want to draw attention to yourself, just premix the meal and bring it in a Thermos.

Here's another example of a coping skill. I have to bring my workout clothes with me to work, or you'll never see me in the gym. After fighting rush hour traffic for 40 minutes and finally getting home, the last thing that I want to do is leave the house. Other people have told me that it works better for them to train before work. After a long, hard, stressful day, they are more likely to justify skipping a workout. Another coping skill is to make sure the foods in my cooler taste great. Let's face it. If I bring bland food to work, it is only a matter of time before I begin to look for something more interesting. This is where candy, chips, and other junk starts to look really good. Another key is to make sure that I shop once a week, every week. This simple coping skill allows me to have all the necessary foods available to cook adequate meals. I normally allocate Sunday afternoons for shopping. Immediately after I shop, I usually cook enough food to last me two or three days.

Another misconception is that certain failures are due to a lack of willpower. If you were a recovering alcoholic, would you go into a bar? Let's suppose that you hadn't had a drink for six months. Feeling a bit empowered, you decide you can handle going into a bar. When you stagger out drunk, you would probably blame it on your lack of willpower. The typical viewpoint in a situation like this is to think that there is something inherently wrong with you as a person. I would contend that your failure had nothing to do with willpower, but rather you failed to implement the correct coping skills to identify and avoid the bar as a high risk. The moment you saw the bar you should have acknowledged that it was a high risk and should not have entered. By implementing the right coping skill or response, you would have been successful. You want a great physique? Then, why aren't you carrying your food? Why don't you bring your workout clothes with you to work? Why are you still eating out and skipping meals?

Without knowing it, you implement a lot of coping skills every day. When you get ready for work, you more than likely get ready in almost the exact same order every day. You probably drive the same way to work every morning and I'll even bet that you leave your house at exactly the same time every day. These are just a few of the coping skills that you have developed over the years that allow you to get to work on time. On the other hand, if you are always late, you have probably never bothered learning coping skills that work for you. These people use excuses like "no time" and "too busy." What they are really saying is that they don't want to learn how to make their daily life more efficient. Building a healthy body depends on your ability to develop coping skills that will help you move toward your goal, not take you away from it.

Top 10 Coping Skills Required for Getting Lean

1. *Shop once a week.*
2. *Develop several great tasting recipes.*
3. *Set up training time and frequency that works within your schedule.*
4. *Prepare large quantities of food ahead of time.*
5. *Carry your food in a cooler.*
6. *Learn to say no to activities you really don't want to do.*
7. *Avoid alcohol! It's a depressant and usually reduces your desire to train the next day.*
8. *Carry a meal replacement with you. (Try MyoPlex, Met-Rx, Lean Body, etc.)*
9. *Set up an eating schedule and stick to it. For example, my meal times are 6:30, 9:30, 12:30, 3:30, 6:30 and 9:30. By eating on time, you avoid hunger.*
10. *Limit eating out in restaurants to two times a week if possible.*



Better Bad Choices™

Which is different than good things going bad.

Developing healthy eating habits isn't difficult. It merely requires choosing the right foods the majority of the time and choosing the wrong foods occasionally. Many years ago, long before fat free products became the rage, I developed an approach to help people satisfy cravings for their favorite foods without giving up their nutritional goals. I call this approach making "Better Bad Choices™." The concept revolves around the idea that higher fat foods contain more calories. Therefore, if a person simply chooses a lower fat alternative, they can satisfy a craving and still drop body fat.

The concept of making better bad choices came about during my early years as a nutritionist. I wanted my clients to know that bad choices are a part of normal eating. Let's face it! We will always have cravings. Attempting to eat perfectly, all of the time, only creates strong preoccupations with food which lead you to failure. In essence, there are three different ways to utilize the "better bad choice" approach:

1. **MAKE MORE POSITIVE FOOD SELECTIONS.** *This allows you to avoid a lot of fat and calories, yet still satisfy the craving. For example, instead of eating potato chips, eat pretzels. Instead of frying your chicken, bake it. Switch from regular Coke to Diet Coke. The list of examples is endless. Let's look at a more detailed example. Suppose you normally eat 2 cups of Haagen Daz chocolate ice cream, which contains a whopping 1120 calories and 68 grams of fat. Switch to the "fat free" version, and you now ingest 400 calories and no fat. Here's another illustration of choice: A 12 ounce T-bone steak contains as many calories as 12 ounces of broiled fish, 2 baked potatoes with sour cream, 2 cups of vegetables, a large dinner salad with fat free dressing, 2 cups of coffee with cream and sugar, and a small dish of ice cream! As you can see, a simple, yet effective way to become leaner is to make more positive food selections.*
2. **REDUCE THE FREQUENCY OF HIGH FAT CHOICES.** *If you usually eat high fat Mexican food three times a week, reduce the frequency to once every 10 days. You would significantly reduce your overall calorie and fat intake and should see a drop in body fat over time. Once again, by reducing the frequency in which you indulge in high fat foods you will be eating healthier.*
3. **REDUCE THE AMOUNT OF FOOD.** *If you usually eat a whole pizza, eat half a pizza. This is now a better bad choice. Likewise, instead of eating a whole basket of chips at the Mexican restaurant, make a conscious decision to eat only half the chips in the basket.*

Of course, the best way to improve your diet is to implement all three approaches. Instead of eating a 12 ounce T-bone steak 5 times a week, eat an 8 ounce extra lean sirloin steak once every 10 days. Yes, it is that simple. Most of you are more than likely already making better bad choices. When trying to eat healthier, it helps to know that you don't have to be on a rigid diet all the time. Of course, anything labeled "jumbo," "giant," or "super" spells disaster.

Since we have more "fat free" foods available than ever before, and more are entering the marketplace every day, it would seem that making better bad choices would be easier now than ever before. Companies are scrambling to create as many fat free foods as possible knowing that statements like "reduced fat," "fat free" and "light" are the keys to catching your attention. However, I think that some food manufacturers have forgotten what we really want from these foods and many dieters are overlooking certain aspects of these foods that need to be considered.

In an effort to give you lower fat products, many companies resort to unsavory marketing tactics. A product may have less fat, but it may not be a better bad choice if it contains twice the calories. It is easy to lose sight of calories when you are tempted by the many fat free and reduced fat products available. After all, if it is fat free most people feel more comfortable eating it. Consequently, there are a lot of people munching and wolfing down fat free chips and cookies without realizing all the extra calories they are consuming. I have seen a lot of athletic people reaching for products that they feel are better bad choices; yet, upon closer examination, they really aren't. Companies know that you are trying to make better bad choices, but they still want you to buy their product. They haven't changed the food as much as they have changed the way they market the foods to you. To illustrate how underhanded some of these companies have become, I will give you detailed examples of common snack foods that many athletes munch on from time to time. You can be the judge and decide for yourself whether you think the new label laws and proliferation of fat free foods have really contributed to our ability to get lean.

There are several ways a company can trick you into purchasing their lower fat versions while at the same time blinding you from spotting what you really need to know. Like a good magician that waves one arm to attract your attention, many of these companies will throw what you want to see in your face so that you won't notice the switch. For example, in big bold letters on the box of Reduced Fat Triscuits is the claim "40% less fat" than the regular Triscuits. What they are not telling you is that their comparison is based upon it's "fat by weight" and not "fat by calories." This distinction is important because most consumers misinterpret the meaning and assume that the comparison is based on calories. Yes, 3 grams of fat is 40% less than 5 grams of fat. However, once you factor in the calories, the "Reduced Fat" and "Original" products differ by a mere 11% fat (not 40%). Many companies employ this kind of tactic on products such as crackers, ice creams, microwavable popcorn, cookies, etc. So, beware of claims like "98% fat free," "Reduced Fat," and similar claims. They are usually meant to entice you, not educate you. Another word that you should not fall prey to is the word "Light." Many people mistakenly believed that the new label laws would do away with vague terms. Unfortunately, the term "light" can still be as deceptive as ever. Light can be used to describe any food in which fat has been reduced by 50% or calories have been reduced by 33%. "Light" does not mean low fat. The term "reduced fat" can be equally deceiving. "Low fat" or "reduced fat" actually means that the food has 25% less fat than the same brand's counterpart. 1/2 cup of a reduced fat version of a super premium ice cream can have 12 grams of fat (compared to 16 grams in the regular version). 12 grams is 25% less than 16 grams, but it still contains more fat than many other regular ice creams. And, most importantly, it is still very high in fat.

Another way a company can trick you is to alter serving sizes so that you are comparing different size products. For example, when you compare a bag of regular Fig Newtons to the Fat Free Fig Newtons, it is easy to overlook the fact that you are comparing a 31 gram portion with a 29 gram portion, respectively. This alters the numbers on the package and makes it very difficult for the consumer to compare. At first glance, the Fat Free Fig Newtons appear to have less calories and sodium. You will discover, however, that the calories and sodium are almost identical after adjusting the numbers so that the serving sizes are equal (which is very difficult to do in the grocery store aisle.) One thing that is not identical about these products is the price. Although the total package price for Fat Free Fig Newtons (\$3.19) is the same as the total package price for Regular Fig Newtons (\$3.19) the amounts contained within each package are different. The Regular Fig Newtons package contains 16 ounces while the Fat Free Fig Newtons package contains only 12 ounces. Therefore, the price per Fat Free Fig Newton is much higher. As in the Fig Newtons case, the reduced fat version of a product often costs more than the original counterpart, not because they cost more to make, but because companies know that you are willing to pay extra. Since many people don't make the price comparison, they end up spending more money for less of the product.

Just compare the Reduced Fat Snack Well's Chocolate Chip Cookies to a bag of Chips Ahoy and you'll see what I mean. If you ate the whole bag of Chips Ahoy cookies, you would have ingested 1700 calories. Yet, if you ate the same amount of Snack Well's Chocolate Chip Cookies you would have ingested 2040 calories! In most cases, many people eating too many fat free or reduced fat foods have lost count of calories.

Many lower fat versions of products contain more sugar than the original. After all, how do you think they made the product taste so good? Companies generally replace the fat with extra sugar to create a better mouth feel, taste, and texture. This is both good and bad. Because sugar is not as calorie dense as fat, by using sugar in place

of fat, the product should have less calories. Unfortunately, in most cases, that is not the way it usually works. Many companies use so much sugar in their products that the calories often equal or exceed the higher fat versions! Food manufacturers understand that people do not want to give up their favorite foods. We want to eat the same products without the fat and we want them to taste as good as (or better than) the original. In order to accomplish this and to satisfy the consumer tastes, companies simply use more sugar.

Let's not forget about calories. While some fat free products do contain less calories, the difference really isn't all that much. For example, an ounce of pretzels contains 110 calories, while an ounce of potato chips contains 140 calories. The difference is 30 calories per ounce. Yet, the calorie savings can be obliterated very easily if you eat twice as many pretzels. The statement "Fat Free" does not mean "Freedom to Overeat."

So what's the bottom line? For starters, when you make a better bad choice make sure that it really is one. Don't just compare fat grams. Make more accurate comparisons by looking at serving sizes, ingredients, the true meaning of statement or claims, and the cost comparison. Also, if you buy a bag of cookies, you will probably eat the entire bag. You may not eat it all at once, but it won't last too much longer than a week. So, add up the total calorie content of the whole bag, and take note of how many extra calories you just added to your weekly intake. Watch out!



Food Lobbyists & Their Effects on Our Foods

Somewhere in a dark and dingy office, a group of marketing wise-guys are plotting against you. It's not just the marketing idiots that are out to get you. Even our government is thinking of ways to serve and protect the interests of industries they are responsible for, and their interests may not be the same as yours! If the new label laws were supposed to be designed for the welfare of society, why did our government allow lobbyists to prevent the percentage of fat from appearing on the labels? Everyone still has to do a bit of long division in order to figure the percentage of fat found in the foods they eat. Wouldn't it have been easier and much more effective to simply tell consumers the actual fat percentage? Also, why don't the new labels list the teaspoons of sugar in foods? Instead, the sugar content is listed in a metric measurement that very few can understand. Wouldn't

it have been better if the new labels showed the amount of sugar in a household measurement that everyone could relate to instead of a metric measurement? You have lobbyists to thank. They prevented you from getting the kind of information that would help you and your family because they were paid by large corporations to protect their interests, not yours.

If you are over 45 years old, you might remember learning about nutrition and the seven basic food groups. Some of you may even remember the eleven basic food groups. However, most of us were taught at school about the "four basic food groups." Created in 1957 by the USDA, the "four basic food groups" was an attempt to set dietary guidelines for the average American. After many years, the USDA has declared the "four basic food groups" obsolete and has created the new Food Guide Pyramid to replace previous dietary guidelines. Nevertheless, as children in the 1990's begin to learn about the new Food Guide Pyramid, their parents will probably notice that it is closely related, almost a twin, to the four basic food groups that they learned in the 1950's. Basically, the new Food Guide Pyramid is as follows: located at the top of the pyramid are the foods that we should eat the least of -- fats, oils, and sweets; below that sit two food groups that are split in equal amounts. One group is for the milk, yogurt and cheese, and the other group is for meat, poultry, fish, dry beans, eggs and nuts. Under that are two more groups representing fruits and vegetables. Finally, located at the bottom of the pyramid are foods that we should eat abundantly like breads, pastas, cereals and rice.

The pyramid suggests that Americans should eat a specific number of servings daily from each basic food group. For example, the pyramid suggests that we should eat fats, oils and sweets, sparingly which makes good sense. It goes on to recommend that we eat 2-3 servings each day from both the dairy and meat groups. Also, it recommends that we consume 3-5 servings each day from the vegetable group, 2-4 servings each day from the fruit group, and 6-11 servings each day from the grain group. Whew! That seems like a lot of food! Does the pyramid, really represent a "healthy" diet though?

While the pyramid does encourage Americans to eat more grains, rice, vegetables, and fruits (which will improve our health), we should be aware that there are a few flaws in the new pyramid and that our government doesn't always look out for our best interests. For example, as you glance over the USDA's recommendations, notice that the Pyramid suggests that all fats are bad and that everyone should "steer clear" from all fats. So, I'm curious as to why red meats and high fat dairy products were not grouped with fats at the top of the pyramid? High fat dairy products and red meat contain the worst type of fat -- saturated fat. Yet these products were excluded from the "use sparingly" group. Whole milk and cheese are grouped with low fat milk products implying that all milk

products are “healthy.” Similarly, red meat is grouped with poultry, fish, and beans, which may lead people to believe that red meat is as healthy as chicken or fish. If we followed the advice of the USDA and ate 2-3 servings of red meat each day, that would amount to about 9 ounces of red meat per day (that’s a lot of fat and cholesterol). In reality, Americans should omit as much red meat from their diet as possible. Red meats and high fat dairy products should have been banished to the fats, oils and sweets section of the pyramid.

So why are these high fat dairy foods and red meat not on the top of the pyramid? And, why did the USDA mix red meat with poultry, fish and beans all into one group? In part because that is how they were grouped in the past. The “Meat Grouping” used by the USDA was first introduced during the 1950’s, when all proteins were grouped together. At that time we were basically “in the dark” about fats and their effect on our health. In the 1990’s, however, it would take a pretty good stretch of one’s imagination to think that red meat is as healthy as beans. Therefore, by grouping red meat and beans together, the new Food Guide Pyramid is likely to send mixed messages. People may assume that red meat is as healthy as beans or that beans are as unhealthy as red meat and should be avoided. The nutritional values of these two foods are very different; they should not be treated equally. It would make far more sense to group beans with grains, pastas, and rice.

Another important reason for the odd grouping of high fat foods involves politics. Consider the fact that the United States Department of Agriculture’s main goal is to protect and promote the livestock industry. If the USDA announced that Americans should eat red meat and dairy products “sparingly”, it would be defeating its own goal. It seems as if the USDA has a conflict of interest; yet, the USDA is the agency that is allowed to suggest how we, as a nation, should eat. By looking at the pyramid, it seems that the USDA doesn’t mind fattening up Americans like cattle, as long as the meat and dairy industries keep thriving. By and large, it appears that the USDA bowed to political pressure and adapted the Food Guide Pyramid so that it better represented what the meat and dairy industry would like Americans to eat, as opposed to what was best for America’s health. It makes you wonder, what exactly would the USDA have done if it was not supporting the meat and dairy industry?

Can you really trust the government to supply you with accurate information that will help you eat healthier? Not completely!! If you really want to eat healthier, you must learn to create and adapt your own “daily diet” so that it is perfect for you and so that it meets your health goals. Then, you must be able to decide on your own whether the foods that you eat fit into your daily diet.



Calories

Little changes can yield huge results.

All food is defined quantitatively in terms of calories as a convenient basis for computing its relative energy value. A calorie is a measure that is used to express the energy value of food. By definition a calorie is “the amount of heat necessary to raise the temperature of 1 kilogram of water 1 degree Celsius.” What that actually means is that a caloric value of a food is determined by burning it and measuring the heat it produces. Technicians place the food into a bomb calorimeter (a chamber filled with oxygen sitting in a vat of water). After sealing the chamber, they set off an explosion and the heat from the burning food causes the temperature of the water to rise. The more heat produced by the burning food, the

hotter the water becomes. The amount of heat given off by the food is then measured in units called calories. This is how scientists arrive at the amount of calories contained within the proteins, fats and carbohydrates found in our diets. A gram of protein or carbohydrate releases four calories, while a gram of fat or alcohol releases nine and seven calories, respectively.

During the 60’s and early 70’s, dieting centered around the concept that a calorie was just a calorie. That’s why calorie counting was so popular. The concept was that anyone could simply figure out how many calories they required per day and shave back their calories to meet that level. The end result would be guaranteed weight loss. But as time went on, many health care practitioners began to realize that calorie counting wasn’t working very well. As the mid 1980’s arrived, the trend changed to concentrating on low fat diets because we became a bit more aware of the effects that different sources of calories had on the body. One interesting piece of research that illustrated that “calories are not created equal” was done on 2 sets of mice. Researchers fed both groups of mice a high calorie diet. The first group’s diet consisted of high quality, low-fat sources of complex carbohydrates and protein. The second group ate the exact same number of calories, except their calories were comprised of sugar and fat. Theoretically, if a calorie is just a calorie, then both sets of mice should have gained the same amount of weight. The amount of exercise between the two groups was somewhat constant because they were all confined to the same size cages. They were fed at the same intervals and water intake was monitored. The end result was that the group that was fed the fat and sugar diet gained 30% more body fat than the first group that was fed low-fat, complex foods.

I think the experiment illustrates two important points. First, your metabolism is affected by a multitude of different things; and to maintain or increase your metabolic rate, you must pay attention to which foods have the greatest effect on your metabolic rate. Some foods have a greater thermic effect upon the body than others. Certain foods increase your metabolic rate through a process known as “The Specific Dynamic Action of Food.” Since your body has to burn off some of its own calories to do the work of digesting the food you eat, the more complex the food is, the greater the thermic effect it generates.

For example, your metabolic rate will increase by approximately 5% in response to eating fats. In other words, for every 100 calories of fat you ingest, your body will burn off about five of its own calories to do the work of digesting, absorbing and assimilating the fat. With the ingestion of carbohydrates, your metabolic rate will increase by approximately 10%. That means 10 calories are burned to do the work of digesting 100 calories of complex carbohydrates. The thermic effect of protein is the highest of all foods. With protein, your metabolic

rate increases by approximately 17-20%. The difference between the thermic effects of each food lies in how much work has to be done to break the food down. There is a lower thermic response from carbohydrate and fat ingestion because less energy is required to breakdown and store carbohydrates (as glycogen) and fat (as triglycerides). Protein possesses a much higher thermic response due to the amount of digestion required to break apart the protein, synthesize peptide bonds between amino acids, pull them through the intestinal wall, and then restructure them back into proteins that are identical to your body proteins. Consequently, if your calories are derived from high quality protein and complex carbohydrates, you will be eating in a manner conducive to increasing your metabolic activity.

Second, I think this experiment illustrates that some foods may exhibit certain changes in the physiology of the body by altering certain hormones, and thereby making fat storage more likely. The combination of fats and simple sugars does have a lower thermic effect; but I think the effects of simple sugars and fats together play biochemical role in the storage of body fat. You see, eating too much simple sugar raises insulin and glycogen concentrations in the blood causing fatty oxidation to be curtailed and lipogenesis is induced. We'll look more at this when we discuss the glycemic index of foods. As you can see, the old adage that "a calorie is just a calorie," is no longer a concept that is widely accepted.

When it comes to reading dietary advice in a magazine, people often forget to whom the information is directed. For example, if you read an article about getting a bodybuilder ready for a show, a dietary profile that contains about 10% fat, 30% protein and 60% carbohydrates may be recommended (that ratio could be subject to change as the photo shoot or contest approaches). However, that dietary advice wouldn't necessarily apply to a bodybuilder during the off season wishing to gain mass. Consider this: on a football team, the nose guard has to keep his percentage of body fat above 18%. He needs the extra bodyweight to withstand the blows from the opposing 300 pound linemen. This guy needs to be on a diet higher in calories, protein and fat. This diet is going to contain at least 30% fat. Yet, on the same team, the wide receiver has to keep his percentage of body fat down to about 6%. In addition, he would benefit by keeping his weight around 175-180. His goal is to be fast and elusive, so he needs less fat and possibly more carbs. Yet, the running back had better carry at least 25-40 pounds more muscle than the wide receiver while at the same time keeping his body fat around the 6 percentile. The running back needs to be fast and elusive too; but he needs the extra mass to be powerful enough to break through the line and be able to withstand the hits from the 300 pound linemen. So, he's going to need a diet that is high in protein, moderately low in fat and moderate in carbs. As you can see, there are three different diet requirements for the same sport. The same principle applies to various sports. At different times of the year, depending on the goal, the dietary program of the athlete may need to change depending on what type of training they are engaged in. It all boils down to what the goals are -- to build size, drop body fat, or increase strength and endurance. This is why the cookie cutter approach to nutrition, or the focus on calories alone, doesn't work very well.



Carbohydrates

Perhaps no food is as misunderstood as carbohydrates. They're misunderstood because starches were considered "bad" for many years. More recently they were given a "good" designation but now they seem to have reverted back to "bad" again. Sounds like a touch of schizophrenia to me. I just wish for once that everyone would apply a

little common sense; so things like this would not be so confusing. First, let's take a look at a few basic facts about carbohydrates.

The current trend by the "nutritional world" is to list the complex carbohydrates as whole grains, breads, pasta, rice, fruits and vegetables. The list contains a wide variety of foods with some being "more" complex than others; therefore, I feel they should not be grouped together (more on that later.) Carbohydrates are generally high in fiber, cholesterol free, low in fat (especially saturated fat) and contain a lot of vitamins and minerals. In addition, studies have shown that in countries where people eat more of these foods, the risks of cancer, heart disease, and obesity are lower. Carbohydrates contain the same number of calories as protein (only 4 calories per gram.) In addition, unlike some high protein foods like meats and dairy products, complex carbohydrates are relatively fat free.

The Function – Energy

The primary function of carbohydrates is to act as an energy source for the body. When you ingest carbohydrates, they are digested and broken down into glucose. The glucose is stored in the form of glycogen in your muscles and liver. Any excess glucose is converted into fat or, if you are as fortunate as Don Knotts, the excess is oxidized into the air as heat. To a large extent, muscle performance depends primarily on the quantity of glycogen that has been reserved in the muscle prior to exercise. So, if you want to have a lot of energy for workouts, make sure your diet contains a good balance of complex carbohydrates before you exercise. (Gee, maybe low carb diets may not be so great after all).

Another advantage of carbohydrates is that they are considered protein "sparing." When your diet is comprised of adequate amounts of complex carbohydrates, the body will obtain most of its energy or fuel from the carbohydrates rather than from protein. Hence, carbohydrates help prevent protein (amino acids) from being used as a source of fuel; and therefore, are protein "sparing." If your diet is too low in carbohydrates, your body will convert amino acids from within the muscles into glucose through a process known as gluconeogenesis. This will result in a loss of muscle and a change in the way your body metabolizes food.

Basically, there are three varieties of carbohydrates: monosaccharides, disaccharides, and polysaccharides. Both monosaccharides and disaccharides are considered simple sugars. Monosaccharides include glucose, fructose (fruit sugar), and galactose. Disaccharides include brown sugar, sucrose, corn syrup, maple syrup, honey, and lactose. Lactose (milk sugar) is found in all dairy products like milk, cheese, cottage cheese and yogurt. Many simple sugars come in a variety of disguises and can be found in everything from pre-workout beverages to baked goods, and frozen yogurt.

Polysaccharides are considered complex carbohydrates and are more commonly referred to as starches.

Polysaccharides include rice, potatoes, beans, yams, barley, lentils, corn, unflavored rice cakes, cream of rice, and most grains. Complex carbohydrates are partially responsible for the pump you feel while lifting weights. If you have ingested enough water and complex carbohydrates prior to working out, the muscles will become more engorged; therefore, they will look fuller and feel tighter.

The Glycemic Index of Foods

No discussion about carbohydrates can be complete without discussing a tricky little chart called the Glycemic Index. It's a chart that lets you know how rapidly certain carbohydrates will raise blood glucose levels. The Glycemic Index, or GI as it is commonly referred to, represents the blood sugar-raising effect of certain foods. White bread is the standard food against which all the others are rated. It has been given a rating of 100, a very high GI food. Obviously, the higher the GI the worse the food is for you in terms of its effect on your blood sugar. The reason for this, as you may have already guessed, is that the higher the GI, the faster your blood sugar levels will rise. A lot of attention has been given lately to the GI of foods, which has left a lot of confused people in its wake.

Current books talk about how bad high GI foods are for your health and how quickly these foods get stored as fat. While there is some truth to this, let's examine a few facts about the absorption of food. First, the GI of a food was based on ingesting it by itself, not with other foods. Thus, white sugar has been rated with a 100. Lentils have a rating of about a 20. Obviously, it makes more sense to center your diet around lentils rather than sugar if you want to stay lean. If you eat carbohydrates by themselves, it would make sense to pay attention to the GI. However, most of us rarely eat a single food by itself. In fact, if you eat correctly, your meals should contain a variety of foods that are balanced between your carbohydrates, protein, and fat.

Secondly, there are a lot of things that affect the GI of foods. For example, when you add fat to a food the GI drops significantly. That's where

the ever popular high fat diet books snagged the reader's interest. By dropping the GI of a food, you also drop the insulin response, so less fat storage is supposed to take place. Perhaps the most important thing that is being overlooked by these books is that protein also lowers the GI of foods. When you eat to get lean, a balanced meal should contain a complex carbohydrate and a low fat source of protein. Consequently, when you eat a balanced meal the GI of a carbohydrate is much less of a concern. In addition, fiber also lowers the GI of foods. Now, add a fiber-rich food like vegetables with the carbohydrate and the protein and the GI is lowered even more.

Considering that, can you see why Americans are getting fatter from the fat free foods? Today's snack foods are so highly processed that even without the fat, they get converted into fat much more easily. Think about this for a moment: If fat lowers the GI of a food, and a manufacturer removes the fat of a snack food, won't the GI be much higher? And if the GI is higher, it elicits a larger blood sugar response, which then causes a greater release of insulin. As the insulin levels increase, it shuttles more fat into fat cells. This is compounded by the fact that most snack foods are low in fat and low in protein. Making matters worse, most people eat snack foods alone without combining them with other foods.

So as you can see, a low GI carbohydrate food when eaten alone wouldn't cause the fat accumulation that a high GI food would. This is why a bowl of oatmeal can contribute to weight loss, while a bowl of processed cereal, such as Fruit Loops, won't contribute to weight loss. Moreover, a snack of low fat cottage cheese is better than baked potato chips or pretzels. In America, there seems to be a quest to create more and more fat free foods. As a result, Americans are getting fatter because they still don't grasp the most basic nutritional concepts.

Healthy Complex Carbohydrates

Barley	Corn Tortillas	Peas
Beans	Cream of wheat	Potatoes
Black-eyed Peas	Kashi	Rice
Light Whole Wheat Bread	Lentils	Rice Cakes
Corn	Oatmeal	Yams

Why Some Carbohydrates Induce a Weight Gain

Carbohydrates aren't necessarily bad foods. It's what the food industry has done to some of them that can make them less desirable. Now that you know about the GI of foods, let's see how it can affect a group of otherwise healthy, low fat foods that are considered part of America's basic food groups. Although breads, pasta, crackers, and pretzels are all part of the carbohydrate family, they may tend to stop or slow down your weight loss if your diet revolves around too many of these refined flour products. If weight loss isn't a concern, then feel comfortable eating these foods; but when possible try to eat them balanced against a low fat protein. Although it can get confusing, no one seems to differentiate between the dietary principles of getting lean and the concept of simply eating for health. Trust me, there's a big difference! Eating to get lean is healthy; but as we have already seen, some foods that are healthy can stop you from getting lean.

If being healthy is your priority, go ahead and eat salmon as often as you want. But, since salmon is a high fat fish (about 44% fat) you might have a hard time getting lean if you eat it frequently. Also, although olive oil is heart healthy it is also high in fat (100% fat). If you pour olive oil all over your food and you are struggling with your weight, chances are good that you will have a hard time dropping body fat. Likewise, while nuts and seeds are very healthy, eating them by the handfuls will slow down your fat loss due to their high fat and calorie content. Avocados and peanut butter are two additional examples of healthy high fat foods that may slow down your ability to drop body fat.

Flour-based products such as pastas, bagels and bread are a few common low fat foods that can slow down or stop your weight loss if consumed in large quantities on a regular basis. Yes, they are healthy and low in fat, but the way that they have been processed alters them in such a way that they aren't what they seem to be. Although many people consider these foods to be complex carbohydrates, I believe that these foods are more closely related to simple sugars than to complex carbohydrates. The actual processing of these foods has changed these carbohydrates from a complex carbohydrate to one of a more simple sugar. For example, consider that there are 400 calories in one cup of flour. To make that one cup of flour, it took two cups of whole wheat grain milled together. But because it took two cups of grain to make one cup of flour, the end product is now twice as calorie dense as that from which it was made. Furthermore, the grain lost its complexity once it was milled. Examine flour closely and you will notice that the large grains have become small, very fine particles that look like dust. These tiny particles have a reduced surface area enabling them to be absorbed much more rapidly than complex whole wheat kernels. The milling and grinding of the grains breaks down the cell walls making it easier for the digestive enzyme called amylase to do its work. Think about how long your body would spend breaking down a kernel of raw wheat. The slow digestion of that kernel makes the food complex, and therefore it enters your blood stream slowly. Due to the processing of the flour, it isn't as complex as it was before it was milled.

Now, if flour is twice as calorie dense after the milling process, then the calorie content of pasta and bagels must also be somewhat concentrated. Examine any package of pasta, locate the serving size, and you will notice that in two ounces of dry pasta there are 210 calories. Two ounces of dry pasta is less than a small handful! Are you aware that the average size bowl of pasta contains between 850 and 1,100 calories?

Lotsa Pasta & Bigger Bagels

To prove this point, I conducted an experiment in one of my eating management workshops. I asked each person to serve themselves the amount of pasta they would normally eat and that we would be making a low fat sauce to go over it. This way, they were completely unaware that I would check the weight of their serving of pasta! Everyone was extremely shocked when I weighed each bowl and showed them how many calories they had been eating in one bowl of pasta! Place a 210 calorie baked potato in your hand, and it will literally take it over. If you place 210 calories of pasta in your hand, it barely covers your palm.

Did you realize that bagels are actually more calorie dense than pasta because they are made from wheat gluten flour which contains 500 calories a cup? Likewise, bagels are getting bigger due to their recent surge in popularity. So don't be surprised to discover that the bagel you have been snacking on ends up having 400-500 calories. Also, keep in mind that a bagel contains very little protein. In most cases, you could have eaten a chicken breast and small baked potato for fewer calories and more nutritional value than one bagel. Compared to a bagel, a chicken breast and baked potato contribute more toward a lean body, not to mention bagels are a binge food for a lot of people. Some people don't just eat one a day, but rather two or three.

Most products made from processed flour fall under the same category as pastas and breads. No matter how low in fat a food is, eating too many pretzels, crackers, bread sticks and processed cereals can slow down your weight loss. Again, let me clarify and restate that all of these products are indeed healthy. It's not that these foods are off limits; but rather too many of them can dramatically increase your total calories -- more than you ever realized. As I mentioned above, these processed foods can also be binge foods for many people. So, pull back on the processed flour if you have trouble dropping body fat and replace these foods with lean meats and complex carbohydrates.

Fruits & Vegetables

No one would dispute the fact that eating more fruits and vegetables is the best way to increase your vitamin and mineral intake and to improve your health. In the research that has been conducted over the years, the strongest and most consistent pattern seen is that eating a variety of fruits and vegetables provides the body with hundreds of antioxidants which in turn may help prevent cancer. Therefore, eating fruits and vegetables in sufficient quantities may help protect the human body from disease.

Although both have many positive attributes, vegetables contain more vitamins and minerals than fruits. Nevertheless, many people find it easier and more convenient at first to increase their intake of fruits because fruits don't need to be cooked. Fruits can be carried with you "as is" and eaten just about anywhere. It is important to note, however, that when we purchase non-organic fruits and vegetables we run the risk of consuming pesticides. Wash your fruits and vegetables well before eating them, and purchase fruits with thick skins that can be removed. For example, bananas, oranges, pineapples, and watermelons have thick skins that act as a natural barrier to pesticides.

For many of us, a vegetable was something you tried to slip under the table to old Fido, who then spat it up for mom to find later. Or, it was a great piece of artillery like when you placed your peas on the end of a spoon and launched them from your base station. Basically, there is no such thing as a bad vegetable. Unless of course, you fry the vegetables or convert them into a high fat snack like potato chips or carrot cake. Oh sure, they can make you look really stupid when they're stuck between your teeth as you talk to the most gorgeous blonde in the gym. But they're not bad per se. They just have a lousy sense of humor. Vegetables contain many important vitamins and minerals, are low in fat, and often contain plenty of fiber. The use of fiber rich foods such as fruits and vegetables, coupled with a high water intake, helps reduce the risk for colon cancer and eliminates most bouts of constipation. Symptoms of constipation include a feeling of fullness and constant bloating in the abdominal cavity. The bloat may become so uncomfortable that bending over or performing exercises is difficult. If this becomes a problem, the first thing you should do is increase your water intake. Second, increase your fiber by ingesting various fibers like cellulose and hemicellulose (which are contained in foods like bran, whole grains,

and vegetables). These fibers act as tiny sponges within the intestines and absorb many times their weight in water. As a result, the feces become softer and bulkier which makes movement through the intestines easier. If you experience excessive gas, you could be eating too many vegetables. Avoid raw vegetables since they are the hardest to digest and usually create the most gas. If you discover that a certain vegetable (like broccoli, cabbage, or cauliflower) causes more gas or bloating than others, then avoid that vegetable. However, don't cut vegetables out completely. Just reduce the amount you are eating and see if that alleviates the problem.

Over the years, scientists have consistently found a link between fruits and vegetables and cancer prevention. When animals are fed a diet rich in fruits and vegetables and are exposed to carcinogens (chemical compounds that promote cancers), they are less likely to develop cancer. Furthermore, studies have shown that people who consume a lot of fruits and vegetables have lower rates of cancer. This could be due to the fact that vegetables and fruits contain antioxidants like beta-carotene, and vitamin C, as well as fiber. Also, people eating more vegetables and fruits may also be doing other healthy things that help reduce their risk of disease, like eating less fat and exercising.

Other components may be more responsible for the benefits of fruits and vegetables — phytochemicals. Phytochemicals are chemical compounds within fruits and vegetables. There are literally hundreds of them. For example, fruits contain a bunch of 10 letter words like limonene, ellagic acid, ferulic acid and caffeic acid, all of which help increase the production of enzymes. These enzymes may help scavenge, dispose of and prevent carcinogens from altering a cell's DNA. Cruciferous (green leafy) vegetables like broccoli, bok choy, and Brussels sprouts contain dithiolthiones, indoles and isothiocyanates that trigger the formation of enzymes and help block carcinogens from damaging cells. Grains also contain a number of phytochemicals which may help slow down the reproduction of cells in the large intestine and therefore help reduce the risk of colon cancer. Researchers are currently studying these chemicals to better understand how and why they may help reduce our risk of developing cancer.

Healthy Fruits

Apples	Grapefruit	Passion Fruit
Unsweetened Apple Sauce	Grapes	Peach
Apricots	Honeydew Melon	Pear
Bananas	Kiwi	Pineapple
Blackberries	Mango	Plum
Blueberries	Nectarine	Raisins
Cantaloupe	Orange	Raspberries Strawberries
Cherries	Papaya	Watermelon

Healthy Vegetables

Artichoke	Celery	Onions
Asparagus	Eggplant	Peppers
Bamboo Shoots	Green Beans	Radishes
Broccoli	Greens	Shallots
Brussels Sprouts	Leeks	Spinach
Cabbage	Lettuce	Tomato
Carrots	Mushrooms	Water Chestnuts
Cauliflower	Okra	Zucchini

Sugars

Some Not-So-Sweet Facts

Americans eat their weight in sugar each year. On average, this amounts to about 140 pounds. You may find that figure hard to believe if you don't add much sugar to the foods you eat. That is because most of the sugar we eat is added into our diet by the food industry. Although you may not be aware of it, sugar is hidden in the vast majority of processed foods. There's sugar in salad dressings, soups, tomato sauces, yogurts, and even processed meats. So it's really hard to avoid it especially if you eat canned or processed foods.

If you asked me for directions, would you know exactly what to do if I responded by telling you the distance to travel in metrics? Let's say you were looking for the nearest gas station. Instead of telling you how many miles to go before turning right, what if I said, "Go 25 kilometers and turn right." Let's face it. Most of us simply don't have the foggiest idea how to convert metric measurements to household measurements. We speak in terms of miles, pounds, and household measurements like teaspoons, cups, and quarts. In contrast, if the nutrition facts panel states that the product contains 40 grams of sugar, would you know how many teaspoons that is? Probably not. Here's the inside scoop on converting those nasty grams into teaspoons. Whenever you look at a nutrition facts panel, locate the complex carbohydrate listing and right beneath it you will find the grams of sugar listed. One teaspoon of sugar contains 4 grams. So, just divide the grams of sugar by four and then you have the number of teaspoons of sugar within the food. For example, if a product has 40 grams of sugar then $40 \div 4 = 10$ teaspoons of sugar.

What about soft drinks? A 12-ounce can of soda contains up to 13 teaspoons of sugar. And let's be honest. Don't most people usually have more than one soda a day, maybe more like two or three? This calls for some math. If you drink three regular sodas a day, that is equivalent to 39 teaspoons of sugar ($13 \times 3 = 39$). I really don't think that anyone would sit down and eat a bowl filled with 39 teaspoons of sugar but taking our example a step further, what happens over a week? If you drink three regular sodas every day for a week, you will have consumed 273 teaspoons of sugar, or get this -- 95 tablespoons! That is equivalent to 308 cups of sugar in a year! I think you catch my drift!

What Does Sugar Have to Do With Fat?

Well, rather than rehashing the Glycemic Index and all, just remember that simple sugars are the fastest food converted into fat, next to fats. Let me point out that sugar consumption adds to obesity as much as high fat foods. Naturally when a person eats more sugar, they end up eating less nutritious foods and more calories. As the soda example shows, people snacking can ingest a lot of sugar very quickly. The body has no real need for processed sugars, so a diet high in sugar is high in empty calories. It doesn't really matter where a sugar comes from either. White sugar, honey, brown sugar, corn syrup, rice syrup, glucose, fructose, malt syrup, barley syrup, and light molasses all contain the same amount of vitamins and minerals--virtually none! The fruit concentrates don't add much in the way of nutrition either. So, if a product is touting the fact that it is made from peach concentrate, pear concentrate, or any other fruit then ignore the hype. By refining any complex carbohydrate (like corn or rice), we can create sugars that are very similar to sucrose, but sound much healthier. Corn syrup, malt syrup, barley syrup or rice syrup may sound healthy and may even sound complex. But like fruit and milk sugar, once the corn, malt, barley or rice is processed it loses its nutritional value and becomes a simple sugar. For example, when you read the label on many "health bars" or "energy bars," you will notice several forms of sugar. Many are loaded with sugars like corn syrup, fructose, glucose, rice syrup, honey, brown sugar, malt syrup, and many others. Manufacturers tend to use these types of sugars, because they sound like they come from "healthy" foods. Consequently, you may draw the wrong conclusion that these sugars are as healthy as the foods they were derived from.

Sugars also contribute to heart disease, diabetes, and tooth decay. In addition, sugars are converted into triglycerides by the body. Although we don't see many 10-year-old children with advanced heart disease, we know that the start of this disease begins at a very early age. In fact, children as young as six can have elevated

triglyceride and cholesterol levels. Although it may take many years for the effects of an unhealthy diet to show, by the time it does it may be too late to reverse. Likewise, let's not forget the role that excessive sugar intake can play in the development of diabetes. Further, tooth decay is one area we all associate with excessive sugar consumption. The reason that sugar causes tooth decay is that sugars are somewhat sticky and tend to adhere to the teeth. Just think of all the money you'll save in dental bills by simply limiting the amount of sugar you eat.

How Much Sugar is Okay?

Food labels list the amount of sugar (in grams) it contains. So simply tally up these numbers for one average day and you will have the number of grams of sugar you've eaten for the day. If you can keep your sugar intake below 40 grams a day, you deserve a pat on the back. If you keep it under 60 grams, consider yourself at least trying. But if you are eating more than 60 grams of sugar a day, start saving about 10 percent of your monthly income for the dentist, and future heart transplant.

What I Think of the Atkins Diet!

(NOT MUCH)

Why Low Carbohydrate Diets Don't Produce Long-Term Results

Enough about the Atkins diet, let's talk about low carbohydrate diets in general. Boy, am I frustrated. If I had a dime for every time a person asked me about the new "high fat, low carb diet", I'd be a millionaire. It's frustrating because it's like a used car salesman that's willing to sell you a lemon by highlighting the up-side of a car, but forgets about letting you in on the down-side. In the case of the low carbohydrate diet, the down-side outweighs the up-side by a huge margin. A problem that adds to the confusion is the simple fact that cutting back on carbohydrates works, at least for a quick drop in body fat and body water. The piece of the puzzle missing for most dieters is the long-term effect on the body due to such a drastic reduction in carbohydrates.

In case you haven't heard the latest scoop on the high fat, low carbohydrate diet, let me fill you in on the concept. This diet was very popular during the 1970's and was popularized by Dr. Atkins. Like many diets of the past, this one gained a lot of press. After a couple of years of popularity, Dr. Atkins' dieting approach fell by the wayside for many reasons. Unfortunately, the low carbohydrate, high fat diet is back and has gained in popularity once again. In addition, The Zone and Protein Power have revitalized the Atkins Diet. The basic premise is that a person should eat more protein, more fat and very little carbohydrates as the day wears on. Because the dieter is eating more fat, they tend to feel full longer, and this helps the person exert more control over hunger. In the past, people were allowed to eat as much red meat as desired, but had to keep their carbohydrate intake as low as possible. This combination of foods causes a chemical reaction, thereby causing the person to burn body fat at an accelerated rate. It's called a Ketogenic Diet. The low intake of carbohydrates, coupled with a high fat diet and exercise causes the production of ketones. Ketones are the chemical residue of broken down fats in the blood. To be more specific, if insufficient carbohydrates exist, the body begins to mobilize fat to a greater extent than it can use. The result, both at rest and after exercise, is incomplete fat metabolism and the accumulation of acid by-products called ketone bodies. This situation can lead to a harmful increase in the acidity of the body fluids, a condition called acidosis or ketosis. The Ketogenic Diet was conceived in the 1920's by doctors in France and the United States. They discovered that prolonged starvation promotes ketosis as the body uses its fat reserves. So, they devised a way to mimic the chemistry of starvation through diet. The current diet revolution is nothing new; it's just an adaptation of these old concepts. The problem is that most people get their information from uninformed sources which fail to understand the scope of their recommendations. If you've started a higher fat, lower carbohydrate diet, then here are a few things you should know:

1. *While reducing carbohydrates, you will see a drop of bodyweight and body fat. However, if you drop carbohydrates too low while exercising, you could alter your body's T3 levels. T3 is an active thyroid molecule that helps regulate your metabolic rate. Diets that are low in carbohydrates tend to cause a reduction of T3, which in turn can slow down your metabolic rate. This is particularly true for people who under-eat and over-exercise.*
2. *A lot of the weight you drop while on a low carbohydrate diet is water weight. For every gram of carbohydrate you ingest, about 3-5 grams of water usually accompany it. By decreasing your carbohydrate intake you naturally drop body water. Although this may sound like a good idea, when you resume eating carbohydrates you may find that your body rebounds and retains excess water. The water retention will dissipate after several days, but it wreaks havoc on the dieter's mental state.*
3. *During the 1970's, clinicians began noticing that people who followed the Atkins diet regained their weight very rapidly once they ceased the diet. In fact, they found the longer a person had been on the low carbohydrate diet, the more carbohydrate sensitive they became. Further, when this diet was combined with exercise it caused people to become even more carbohydrate sensitive. This could be the most devastating pitfall, because once the low carbohydrate diet has ended, and the person tries to resume eating carbohydrates, their bodies tend to hoard and store the carbs as opposed to using them for energy. The person notices a fast accumulation of body water that's followed by an abnormally fast body fat gain. Although the water weight will eventually drop off, the person notices that they gain body fat very easily, but lose it more slowly in the future.*

4. *Carbohydrates provide a “protein sparing” effect. Under normal circumstances, protein serves a vital role in the maintenance, repair, and growth of body tissues. When carbohydrate reserves are reduced, the body will convert protein into glucose for energy. This process is called gluconeogenesis. The price that’s paid is a reduction in the body’s protein stores, or in other words, muscle! We saw in the chapter on yo yo dieting how this loss of muscle mass can result in a person becoming fatter and fatter as they lose and regain weight. All this in turn causes the metabolic rate to slow down as well.*
5. *There’s another problem that eating too little carbs creates. Your muscle fullness depends to a large extent on your carbohydrate intake. Low carbohydrate levels tend to make muscles lose their density and flatten out. Carbohydrates are a great source of fuel, so not eating enough can lower your energy level and make your muscles feel softer.*
6. *Low carbohydrate diets focus on the relationship between carbohydrates and insulin (a hormone that shuttles fuel into fat). However, their suggestion that insulin exerts negative effects is not only misleading, it’s downright flawed. Insulin does play a role in fat storage, but it also causes glucose to be shuttled into muscle cells as well. Our diets should keep blood levels of insulin as stable as possible, not try to suppress its release.*
7. *On the flip side, you’d have to be totally out-of-the-loop if you haven’t heard that more fat increases your risk of heart disease, cancer, and obesity. Naturally, everyone wants to hear that they can eat fats and lose weight. I guess if you want to look good in your coffin, then it is okay with me. I’ve always disagreed with the American Dietetic Association and the idea that 30% fat is healthy. I believe that a diet of 20% or less fat poses a substantial health benefit as well as a reduced risk of obesity.*

It amazes me that this diet is back. Are people’s memories really that short that they can’t remember the reason that the Atkins Diet vanished the first time? Consider what bodybuilders learned years ago. During the 1970’s and early 80’s, every major bodybuilding competitor dieted on a low carb, high fat diet, yet most of them ended up very smooth and not very well defined. The bodybuilders of the late 80’s and 90’s improved dramatically. By having a diet high in protein, low fat, and moderate in carbohydrates, some of the best physiques ever have been produced.

Some confusion about carbohydrates could stem from the fact that people see and hear bits and pieces of information from gym buddies and accept the information as fact. While it is true that as a contest nears bodybuilders decrease their carbs, that doesn’t mean that cutting back excessively yields better results. Over the years, I have found that by removing the starch at the final meal, during the last three or four weeks before a show, bodybuilders tend to get very tight and more defined. And while that is very effective, it’s a far cry from cutting carbs from lunch onward like so many people are doing today.

In many cases, the mere oddity of some diets is what attracts people in the first place. And for others, a biased article designed to sell books placed prominently in a major magazine could be all it takes to attract everyone’s attention. When you hear people talking about a “new” diet approach, stop and ask yourself does it follow healthy guidelines? Does the diet call for measures that you cannot do for life? If so, don’t even try it. Beware of products that suggest that a certain food or special combination of foods possess a “magical” or “special” property that will help you lose weight.



Protein

The medical establishment screaming about a high protein intake causing kidney damage has never made sense to me. We have been told by the medical establishment for years that protein is bad for your kidneys and can cause osteoporosis. Yet, Americans ingest more protein than any other civilization and we are not plagued with more kidney disease because of it. On the contrary, the majority of kidney disease stems from diabetes, alcohol and drug abuse, and genetic factors, not protein consumption. In addition, the medical establishment has contended that athletes don't need more protein and that the protein requirements of an athlete's diet should be a mere 10-15%. Not only is that information outdated and wrong,

but current research and scientific studies have just now begun to revamp their original stance. In fact, while eating too much protein isn't harmful to healthy humans, eating too little is! Furthermore, according to the protein researchers that I have interviewed on my radio show, there has never been even one study that has proven that protein harms healthy kidneys. It seems that the scare has arisen from a misinformed medical establishment that sees the damage protein can have on people that are in diseased states.

Every five years, The Food and Nutrition Board of the National Academy of Sciences and The National Research Council meet to determine the various recommendations for the consumption of protein, seven vitamins, six minerals, and calories. Their findings essentially determine where the RDA's should be set. Even though the RDA's are meant to be used as a guideline, too many people look to them as gospel. To determine the RDA for protein, researchers measured the nitrogen balances of a couple of hundred people after they ingested a certain amount of protein. Some people needed more, while others needed less to maintain a positive nitrogen balance. What the researchers did was choose a level that fell in the middle of the groups. As you can surmise, the RDA may meet part of the population's needs, but not all of the population's requirements.

An article published by T.C. Luoma showed that certain adjustments are made to allow for variations in protein quality, and that the RDA has been set two standard deviations above the mean. Therefore, most people in the U.S. will fall under the guidelines of ingesting enough protein even if only 2/3 of the RDA is met. Further, he showed that the RDA was set theoretically high enough to cover the protein needs of 97.5% of the population. But based on this percentage, and the U.S. population being over 250,000,000, more than six million people are not getting enough protein if they ingest an amount equal to the current RDA. Let's not forget that these studies did not include a large portion of athletes. Shouldn't some consideration be given to all the long distance runners, bodybuilders, and strength training athletes?

Now here's the real clincher. For years the dietary protein requirement of adults has been set at .6g/kg/day. The World Health Organization (WHO) has suggested that .75g/kg/day is a safe protein intake for adults, while the Food and Nutrition Board of the US National Research Council (NRC) has set a safe protein intake at .8g/kg/day. Nutritionists have been questioning whether these values are appropriate for all age/sex groups of adults, and in particular, the elderly. As it turns out, both the WHO and the NRC based their original recommendations on the nitrogen-balance studies that were conducted using younger people as subjects. The idea that one basic protein requirement fits everyone has come into question, and for good reason. Let's face it; due to age related changes in body composition, physical activity, food intake, quality of food, and illness all affect the protein requirements of the elderly. Not to mention the fact that digestibility and absorption of protein are often more difficult for the older folks.

The USDA Human Research Center on Aging at Tufts University conducted a short term nitrogen balance study on 12 men and women aged 56-80 years-old. The study placed the participants on one of two different meal plans. Meal plan #1 consisted of the current RDA, .8g/kg/day of protein. The other meal plan contained double the amount of the RDA, 1.62g/kg/day of protein. THE RESULTS: Net nitrogen balance was negative for the lower protein group, and positive for the higher protein group. This clearly proves that the elderly require more protein than the established "authorities" recommend. Based on the outcome of this study, researchers recommended that the safe protein intake for the elderly should be increased to 1.00-1.25g/kg/day. A key emphasis was placed on the recommendation to use high quality protein sources. Now that they have discovered that older people require more protein, maybe now they will conduct studies that will confirm that bodybuilders need more than 10% or 15% of their calories from protein.

Over the course of the last few years, I've seen more and more reports about the benefits of eating more protein. Now, a report in the American Journal of Clinical Nutrition states that "eating too little protein is actually harmful." According to this study women, age 66 to 79, were randomly assigned to two groups. One group received the full RDA for protein, the other group half the RDA. Results showed that after nine weeks, the women that ate less protein showed significant losses in their immune response, muscle strength, muscle mass, and lean body mass.

So what's the big deal you ask? Although this study focused on elderly women, it is very possible that females who over-exercise, and eat a diet of mainly carbohydrates are much more likely to suffer a similar response as the elderly women. It's common for women today to do more and more cardio and to weight train, only to discover that they're getting fewer results due to an inadequate diet.

Dr. Peter Lemon is with the Applied Physiology Research laboratory at Kent State University. He is considered a leading authority on protein metabolism and muscle cell biology. In his study published in the International Journal of Sports Nutrition, he found that strength athletes need between 1.4-1.8g per kg per day of protein, and that endurance athletes need about 1.2-1.4 g/ kg/day. Isn't it interesting to note that runners need as much protein as bodybuilders? The point is that we do need more protein if we weight train and engage in a moderate amount of athletics. Perhaps one of the most overlooked anti-catabolic (preventing breakdown of tissue) agents we know of is food. Everyone is buying the anti-catabolic supplements sold in health food stores hoping to retain precious muscle. However, if their diet isn't correctly balanced, supplements will do very little. Protein is a very anti-catabolic nutrient. You need it and have to eat it at regular intervals during the day. Protein is necessary to build tissue, maintain muscle, repair the body, and increase the metabolic rate. It even plays a role in manufacturing hormones and antibodies. Since protein serves so many different purposes and is so quickly utilized, you must replenish it continually, in small amounts, at even intervals during the day.

To clarify things a bit more, we actually have no needs what-so-ever for protein itself! Protein contains the amino acids that we actually require. And it is the quality and quantity of the protein that determines what protein source is best. There are 20 different amino acids required to build muscle. Of these twenty amino acids, almost half can be synthesized within the body, and are referred to as nonessential amino acids. Simply because an amino acid is called nonessential does not mean that it is insignificant. It merely means that it can be made in the body and it is not essential that we ingest it from our diet. The other amino acids cannot be manufactured in the body and therefore have to be ingested through our diet. These are referred to as essential amino acids. When a protein contains all of the essential amino acids, it is termed a complete protein. On the other hand, if a protein lacks any of the essential amino acids, it is called an incomplete protein. Partially complete proteins can maintain life, but lack certain amino acids necessary to promote growth. Incomplete proteins (like corn, rice, beans etc.,) when consumed alone are totally incapable of sustaining life because they lack one or more essential amino acid. This is another area that baffles logic when it comes to the current RDA's on protein intake. Protein quality varies tremendously from one source to another. When ratings are applied to proteins, egg and milk proteins are given very high ratings because they have very high absorption rates. Plant sources of protein like soy are given a very low rating because they aren't as easily utilized by the body. If a 150-pound male used egg whites as his sole source of protein, he would need to ingest about 50 grams to meet his RDA. But if that same person used soybean protein, he would have to eat twice as much (about 90 grams) to meet his RDA because the absorbability of soy has half the rating of egg whites.

I don't want you to misunderstand what I'm trying to say. I'm not suggesting that super high intakes of protein are good for you. After all, too much protein can be stored as body fat. But what I want to point out is that athletes need more protein than the current recommendations and that protein has been wrongfully given a bad rap. Critics often cite protein as being responsible for the increased cardiovascular problems in America. Although I don't disagree with that statement, I don't completely agree with it either. You see, most Americans eat too much fatty red meat and high fat dairy products as their source of protein, and those come with a heavy cholesterol price tag. They tend to eat a lot of burgers, steaks, bacon, and cheese that are very high in saturated fat. Worse yet, some even fry those foods. This combination is the main culprit of the problems health critics focus on. We can't dispute the benefits that eating more vegetables and grains has on lowering cholesterol levels. But keep in mind, it's not the protein that is the root cause of heart disease, it's the saturated fat and cholesterol.

What about protein and osteoporosis? While it is true that an increased protein intake causes the body to leach out some calcium, the amount you lose is equal to a very small amount. John Anderson of the University of North Carolina fed test subjects extra dairy protein and measured the urinary calcium loss. They lost about 15 mg. of calcium within a few hours. That's equal to a tablespoon of milk. Big deal! And any calcium that was lost from the protein was offset by the dairy they consumed. A lot of foods leach vitamins and minerals from our bodies. So does caffeine, alcohol, and even fiber. Consider this: if meat eaters have weak bones, why don't vegetarians have stronger bones?

The highest quality types of proteins to use are fresh meats, seafood, and egg whites that you cook yourself. Under no circumstances should you eat any type of luncheon meat or processed meat. Even if the luncheon meat appears to be low in fat, do not use it as your source of protein. The amino acid profile and quality of these meats are so poor that using them will not produce the desired results. And if you think the luncheon meat that is sliced at the deli is ok, forget it! Luncheon meats can appear to be low in fat, and can even state zero fat on the label and in reality be more than 50% fat. Don't be fooled by luncheon meats; stay away from all deli sandwich meats.

Low fat dairy products are an exceptionally high quality source of protein and contain a terrific balance of amino acids. Lactose, a simple sugar contained in all dairy products, tends to promote a "smooth" appearance if you eat too much dairy but it is still a healthy source of protein and calcium. The bottom line is this: low fat, high quality sources of protein are an essential part of promoting a healthy body and should be part of a healthy diet.;



Why Luncheon Meats Are Not The Best Sources of Protein

The Luncheon Meat Paste

Mechanicalized Meats

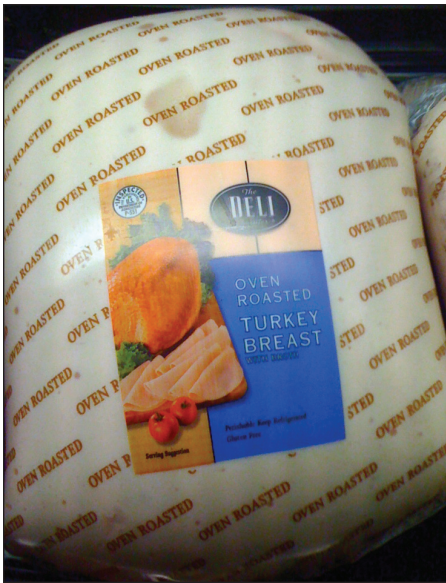
Have you ever thought by purchasing chicken or turkey luncheon meat from your local favorite deli that you would be eating a low fat, high quality protein? Do you order a turkey sandwich on whole wheat bread followed by the statement “please, hold the cheese and mayo” and think that you are eating a low fat sandwich? Are you the kind of person that wouldn’t touch a packaged luncheon meat with a 10 foot cattle prod, yet think that the stuff sliced behind a deli counter is a healthier choice?

If you answered, “I do” to any of these questions, pull-up a chair and make yourself comfortable.

During the 1950’s, major meat companies began to broaden their marketing horizons. They decided to become less dependent on the unpredictable fresh meat market and to produce more processed meats, which have bigger profit margins and more stable prices. As America’s health awareness escalated, meat companies have responded by creating a new line of low fat products to appeal to that perception. For some, this was an improvement on their luncheon meats. But does a low fat luncheon meat possess the kind of quality protein that you require? You be the judge.

In what way do luncheon meats differ from the kind of meats you cook yourself? For starters, luncheon meats are not what you might consider ‘real meats’. They are a ‘fabrication’ of meats and filler mixtures. They usually consists of turkey or chicken parts, oil, water, binders, fillers, sodium, dextrose, broth, preservatives and other ‘secret’ ingredients. This mixture is placed into a stainless steel vat and churned until evenly mixed. After squirting the lunchmeat paste in a square or circular mold it is then compressed, cooked, washed and then sliced and dropped into a plastic packet for retail sale. The mold could be a large orb, like the kind that you see behind a deli case (notice they are all the same shape and size). Or it could be a long cylindrical or square tube for easier consistent slicing for packaging. A misconception that most people have is that the meats sliced behind a deli counter are better than the packaged meat. Basically they are the same, just presented differently. Also, if you think that spending more on your luncheon meat means a higher quality, think again. In most cases, the cost is largely determined by their humongous advertising campaign.

Another misconception some people believe is that meats sliced at many of today’s popular sandwich outlets are healthier or in some way different from the supermarket luncheon meats. The fact is that these meats are often worse. At least in the supermarket, you are given a choice. You can pick one brand over another and look at the ingredient listing on the package. You can look over the fat, sodium, calories, and other stuff that went into the meat. At the sandwich deli, you don’t have access to the label so there’s no way to know exactly what you are getting. Think about it, the less they spend on their products, the more profits they make. You can bet your bottom dollar that they purchased the least expensive meat they could. Without the label you really have no way of checking what kind of ‘meat’ you are going to eat.



Compare this picture with a real turkey breast. If you peeled a turkey breast away from the carcass wouldn't be shaped entirely different? Notice the air bubble located right above the label. All luncheon meats are derived from the luncheon meat paste! Comparing this to real turkey the mechanized meats have lost their complexity. In addition they contain a lot of sodium and preservatives.

Luncheon meats also differ from "real" meats by their sodium content as well. High sodium is one of the best ways to spot a processed meat. Most meats contain some form of sodium. After all, meat is muscle, and muscles are made up of sodium, water, amino acids etc. But processed meats contain exceptionally high quantities of sodium. A real serving of luncheon meat is 170 grams or six ounces, not the measly 54 grams that is suggested. That means a serving of luncheon meat can contain well over 1000 milligrams of sodium! Sodium is used as a preservative and gives the meat a longer shelf life. On the average, many processed meats have a shelf life of three months.

The greatest concern is that the type of sodium they use in luncheon meats usually isn't the kind that you find in your salt shaker at home. The four types of sodium most commonly used, although they can choose from a list of hundreds, are sodium phosphate, sodium nitrite, sodium nitrate, and sodium erythorbate. In many cases, a single serving of luncheon meat will contain all three, and sometimes more. Sodium phosphate is a buffer and effervescent that is often used in nail enamels, detergents, and processed meats. It is on the FDA's "Generally Regarded as Safe" (GRAS) list but is also a known skin irritant to sensitive people if allowed to come into direct contact with their skin. Sodium nitrate is better known as saltpeter. Prisons had used salt peter in the food to help suppress the male sex drive. Sodium nitrite is used very heavily as well. This additive is still often used heavily in the curing and processing of meats and is also used in gun powder. Sodium nitrite has the uncanny ability to chemically react with the myoglobin molecule of the meat and causes red bloodlines to appear in processed meats. To some people this makes the product look fresher and more appealing. Another selling point is that it also helps reduce the growth of botulism spores. And finally, it makes the meat taste more 'tangy' to the average palate. Yummy! Sounds really appetizing, doesn't it? Suffice it to say, the stuff is really nasty. It also combines with stomach acids to form a powerful cancer causing agent called nitrosamine. Sodium erythorbate is used in all sorts of baked goods, beverages, and cured meats. It's mainly used to help accelerate the color fixing in the curing process. This results in a uniform color throughout the product. It is also on the GRAS list with the FDA. The point is, although a luncheon meat may be low in fat and calories, the high sodium content and type of sodium being used in these meats makes them unhealthy.

These days, they make a so-called fat free turkey, chicken and even (amazing as this may sound) ham! Since they don't have any fat and are so low in calories, what could possibly be wrong with these? Although they are a better choice than luncheon meats of the past, they aren't what they appear to be. Let's first examine how a fat free luncheon meat is made. The fat free meats are a fabricated mix just like the regular luncheon meats. The difference in a fat free meat is the replacement ingredients. There has to be a replacement ingredient in order for it to be a well balanced product. Since fat is the glue that held the product together before, more binders and fillers have to take over that role. This allows the weight of each slice to stay up, but the amount of meat drops. Now, if you add a binder that contains calories, the weight of each slice stays up but the percentage of fat within each slice drops accordingly. Neat little trick, eh?

Some of the higher quality fat free luncheon meats are made by treating the meat with an acid while stirring to remove the fat. What you end up with is a product that has more of the fat removed, leaving only the protein. The problem is, if nothing was added to stabilize the product and give it a better consistency it would be like chewing leather. Even when more of the fat is removed, moisture and texture has to be replaced with something else. These meats have to contain binders and fillers to help hold the processed foods together. They add consistency to improve the mouth feel and texture of the product which often acts as a stabilizer. But think about this, to

keep the weight of each slice up, and to add moisture and texture, they have to add these ingredients. The more binders and fillers that are added to each slice, the less room there is for the protein. Water, broths, and fibers are just a few examples of fillers. Various vegetable gums are often used as binders to replace what was lost when the fat was removed.

Here's the interesting part. These meat companies don't have to use nitrates, nitrites, phosphates or other harmful preservatives and curing agents. Sea salt can do the same job. That's the main preservative used in sliced luncheon meats at the health food store's deli, which I might add, if you do buy luncheon meats then Whole Foods would be the best place to buy them.

A food label is like a written contract between the food manufacturer and the consumer. Like most contracts, there are usually loopholes and small print that anyone can overlook. A legal contract can be confusing, incomprehensible, and downright misleading. Like most contracts, what isn't being said is often more important than what is being said. In the case of luncheon meats, a lot is not being said. Check out the label on the next page and see for yourself.



Just check out the following label and lab results!

NUTRITION INFORMATION PER PORTION	
Portion size: 1 Slice (approx. 12g)	
Portions per container: 14-16	
Calories	14
Calories from Fat	4
Fat	less than 1g

The fat appears to be low, "less than 1g" yet, this food contains 29% of it's calories coming from fat!

Many people will purchase this luncheon meat because of the catchy statements and the fact that it appears to be low in fat ("less than 1 g"). Many of them will be surprised, however, to find out that this food contains 29% fat. Since we want to keep most foods under 20% fat, by my standards this food isn't a low fat choice. In addition, this is a six-ounce package of meat. You may be able to get one, maybe two or three sandwiches from 6 ounces. But pay close attention to the "Portions per container" on the back of the package and notice that this package is suggesting that you should get 14-16 servings! That would be like putting a potato chip on a slice of bread and having that for lunch. This product isn't 3% fat by calories; it's 3% fat by weight! There's a big difference. So read on if you want to know just how a product that's 29% fat can be labeled 3% fat. Also, notice that this product is high in sodium. It contains 130 mg. per slice or 2080 mg. per package. Just think of how this kind of labeling would affect the person that is trying to improve his diet and assumes this product is a low sodium, low fat, healthy food; but suffers with heart disease, cancer, high blood pressure, or any other serious disease.

The Results!

I sent four meat samples to a special laboratory to have a complete amino acid analysis performed. My goal was to find out if the low fat turkey and chicken breast luncheon meats sliced behind a local supermarket deli counter would measure up to real turkey and chicken breast. I also wanted to find out if any of the essential amino acids were missing from the luncheon meats. Both the oven roasted chicken breast and turkey breast were made by Sara Lee. The real chicken breast was the Holly Farms de-boned, de-skinned chicken breast. The real turkey breast was The Turkey Store turkey breast tenderloins. Here's what I found per 100 gram sample.

Chicken

Per 100 Grams

Real Chicken Breast Meat

103.54

0

25g

.5g

5%

63mg

Calories

Carbs

Protein

Crude Fat

% Fat

Sodium

Chicken Breast Deli Meat

93

0

19g

1.6g

15.5%

822mg

The real chicken breast contains more calories because it contains more protein and less fat, and that's exactly what you need. Yet, in many instances people are so fixated on only the calories that they overlook other attributes that need to be considered. (Just compare the sodium content between the two). On the other hand, some focus way too much attention on the fat content and completely neglect to notice other important aspects. The chicken luncheon meat I had tested had 21% less essential amino acids per serving than real chicken breast. The turkey luncheon meat had 19% less essential amino acids per serving than real turkey. These sub-samples are based on a 100-gram serving (that's about 3.5 ounces). Let's bring the portion size up to a more realistic quantity that a bodybuilder might eat. In each 8-ounce portion of chicken luncheon meat there are 11.5 grams less protein. Now, assuming you've been eating a deli sandwich mid-morning, lunch, and mid-afternoon, that's 34.5 grams less protein per day. Multiply that by seven days a week and you've been losing out on 241.5 grams of protein per week. But keep in mind, I deliberately purchased the best luncheon meat I could get and that may not be representative of what you are buying. In a similar comparison between the two turkeys, eating 8 ounces of real turkey breast would yield about 148mg of sodium. The same amount of turkey luncheon meat contained a whopping 1478mg.

Turkey

Per 100 Grams

Real Turkey Breast Meat

104.47

0

25.78g

.15g

1%

65mg

Calories

Carbs

Protein

Crude Fat

% Fat

Sodium

Turkey Breast Deli Meat

111.3

0

21.31g

2.9g

23%

647mg



FATS

Eat that way, look that way!

Fats come in solid or liquid forms. All fats are combinations of saturated and unsaturated fatty acids. Depending on their proportions, they are classified as either a “saturated” fat or an “unsaturated” fat. In general, fat is a group of chemical compounds that contain fatty acids composed mostly of carbon and hydrogen. When we say that a fat is

“saturated,” we are referring to a fat that has the maximum number of hydrogen atoms attached to every carbon atom. In other words, the fat is completely “saturated” with hydrogen. Saturated fat is mainly found within foods of animal origin (meats, eggs, milk products, butter, etc.). Saturated fat can also be found in coconut oil and palm oil. Red meats like beef, pork, veal, and lamb are the largest sources of saturated fat in an average Americans’ diet. Red meats supply at least 38% of our daily saturated fat and about 35% of our daily cholesterol. It’s a good idea to limit red meat and some fats because they have been linked to heart disease, cancer, and obesity. Research supports that populations consuming high amounts of animal fat have higher rates of colon and prostate cancer. One study found that people who ate red meat once a day were twice as likely to develop colon cancer. This doesn’t mean you should never eat red meat, but it does make sense to limit your intake and blow off the idea of trying the latest high fat diet craze. Remember, all fat is composed primarily of carbon and hydrogen. Saturated fat has the maximum number of hydrogen atoms attached to every carbon atom, but unsaturated fats are missing one or more pairs of hydrogen atoms. Monounsaturated fats are missing one pair of hydrogen atoms in the middle of the molecule, and polyunsaturated fats are missing more than one pair of hydrogen atoms. The prefixes are derived from Greek words: “mono” meaning one or alone and “poly” meaning much or many. Unsaturated fats are most often found in plants and sea foods. Canola oil and olive oil are examples of monounsaturated fats. Two examples of polyunsaturated fats are sunflower oil and corn oil.

So which unsaturated fat is “better” (healthier), monounsaturated fat or polyunsaturated fat? If I had to choose from the two, I would choose monounsaturated fat. Even though polyunsaturated fats (safflower, sunflower and soybean oils) lower cholesterol levels slightly more than monounsaturated fats (olive and canola oils), there are several aspects of polyunsaturated fat that make it less desirable. First, polyunsaturated fats are more susceptible to oxidation, and oxidized fats appear to be responsible for clogging arteries. In addition, population studies have shown that lifetime consumption of monounsaturated fat is not harmful to humans. Populations in the Mediterranean have eaten large quantities of olive oil (a monounsaturated fat) for decades and have suffered no negative consequences from this type of fat. Longitudinal studies using humans consuming high levels of polyunsaturated fat have not been performed; however, studies using animals suggest that polyunsaturated fat may promote tumors (which may or may not be applicable to humans).

Fats In Oils

For most people, a very common source of fat is oil. Although all oils are 100% fat, no oil is completely comprised of only one type of fat. Most oils contain a combination of saturated, monounsaturated and polyunsaturated fats. It is the percentage of each type of fat (especially saturated fat) that is important. For example, some oils like coconut oil contain a lot of saturated fat and little polyunsaturated fat. Other oils, like safflower oil, contain a small amount of saturated fat and a lot of polyunsaturated fat. Most of us want to lower our intake of saturated fat as much as possible; therefore, we want to choose an oil that is the lowest in saturated fat. The following chart shows the approximate breakdown of fatty acids within common oils.

% Fat Breakdown Of Common Oils

	% Saturated	% Unsaturated		% Total
		Mono	Poly	
Coconut Oil	90	8	2	100%
Corn Oil	14	26	60	100%
Olive Oil	15	75	10	100%
Palm Kernel Oil	85	11	4	100%
Peanut	18	48	34	100%
Safflower Oil	10	14	76	100%
Soybean Oil	16	24	60	100%
Sunflower Oil	10	23	67	100%

The Good Fats

Essential fatty acids are fats that are essential to our health and they are known as linoleic acid and alpha linolenic acid. These two fats serve many important functions within the body. The best sources of essential fats are from flaxseed oil, canola oil, and soybean oil. These fats are called essential because the body cannot manufacture them from other fats; they must be provided from the foods you eat. These fats are necessary for cell membranes and nerve sheaths, as well as for the components of your brain, eyes, and sex organs. Bodybuilders use a small amount of essential fatty acids right before a contest to help accelerate body fat loss. Likewise, essential fatty acid deficiencies are common during dieting and become apparent when the ends of your fingers are dry and cracked.

Trans Fatty Acids and Hydrogenation

The newest fats on the scene, trans fatty acids, are formed when oils are hydrogenated (hardened). They are by-products of partial hydrogenation. What is hydrogenation? Hydrogenation is a process used by manufacturers when they add hydrogen atoms to soybean, corn, safflower, and other liquid oils. This process is used to make the oils more solid and stable, so that they can be used in baked goods. Unfortunately, hydrogenation can transform many of oil's unsaturated fatty acids into trans fatty acids, making the oil react more like a saturated fat. When trans fatty acids are ingested, they cause reactions within the liver and raise blood cholesterol levels almost exactly the same as saturated fats do. Although trans fatty acids raise cholesterol levels to a lesser extent than saturated fats, they are still harmful and their cholesterol raising ability is "hidden" on the new food labels. For example, look on the side panel of almost any margarine box and you will see the words "partially hydrogenated oil" in the ingredient list. "Partially hydrogenated oils" contain trans fatty acids; therefore, the margarine is a good example of a product that has "hidden" trans fatty acids. Although the specific amounts of trans fatty acids vary with each brand, tub margarine tends to have fewer trans fatty acids (partially hydrogenated oil) than stick margarines. The big problem with margarine is that most people do not associate "partially hydrogenated oil" (trans fatty acids) with cholesterol; therefore, eating margarine can still cause their cholesterol level to rise more than expected!

Heart patients that are consuming margarine instead of butter to reduce their cholesterol level may not be as well-off as they think. Much more would be accomplished by limiting the intake of all fats including butter, margarine, and even light margarine.

What's Wrong With This Label?

Add together the number of grams from each type of fat on the label below ($4+1+2 = 7$).

Saturated Fat	4 Grams
Polyunsaturated Fat	1 Gram
Monounsaturated Fat	2 Grams
Total Fat	10 Grams

Notice that the total grams of fat in this product equal 10 grams. But when the grams of saturated, polyunsaturated, and monounsaturated fats are added up, the total is only 7 grams. So where are the missing 3 grams? They are hidden in the form of trans fatty acids, that's where. Apparently, manufacturers are allowed to "hide" the trans fatty acids included in a product by omitting them from the label. Instead of being listed within the saturated fats where it belongs, it is hidden within the total fat. The new laws stipulate that companies may voluntarily list mono and polyunsaturated fats; so don't expect to see these listed on every label. Consequently, there is no way for the consumer to know how much of the total fat contains mono, poly, or trans fatty acids.

It all boils down to not worrying as much about which type of fat is better than another; simply reduce your total daily fat intake to below 20%.

The Honorable Oils

Flaxseed (Linseed)
Canola
Soybean
Pumpkin Seed
Olive

The Acceptable Oils

Corn
Safflower
Sunflower
Sesame
Almond

The Naughty Oils

Palm
Palm Kernel
Coconut
Cottonseed
Peanut

Okay, now that we know all the boring stuff about fats, let's look at a few interesting points about fat. For starters, have you ever wondered why the American Dietetic Association and our government recommend that Americans consume 30% of their calories from fat? Are you ready for this? There is no reason at all! That's right. At the time this recommendation was made, Americans were eating too much fat. Studies showed that a lower fat diet would be beneficial. We were ingesting a little more than 40% of our calories from fat. The government knew that Americans would benefit by eating 20% fat or less; but, they opted to set a higher number. They did this because they felt that Americans wouldn't follow the advice if the amount of fat was set too low. What bothers me about this is that the powers that be didn't give us the correct information. This information would have allowed us to decide if we wanted to eat a lower fat diet. The guideline that is currently in place and set by the RDA is an arbitrary number that was pulled out of thin air. So, when a dietitian, nutritionist, or doctor tells people to keep their fat at 30% or less, it's simply bad advice.

Americans have become a nation obsessed with fat. While that may be good in some respects, I think too many people still don't see the big picture. Eating low fat is one determining factor for good health and a lean body, but it's not the only thing we have to focus on. With everyone's compulsive behavior to cut out the fat, we (as a nation) are getting fatter. Funny thing, critics that have books to sell are now telling us that eating low fat isn't the answer. They claim that we need more fat. I find that interesting. Do you mean to tell me that Americans are fat because

they haven't been eating enough fat! I think part of the problem lies in the advice that people are given about eating low fat. This causes people's perceptions about low fat eating to be wrong. For example, earlier in this book I discussed how eating a healthy, low fat diet does NOT have to be void of taste, texture, moisture or variety! Also, a few stupid books were published that perpetuate people's perceptions by giving incorrect information about eating healthy. These books made the idiotic suggestion that people can eat as much low fat food as they want and still be able to lose weight. So when this dieting didn't work and their waist size went up a few notches, I'm sure a lot of Americans decided to give up on the whole idea of eating low fat. But, I think the real problem lies in a combination of people focusing only on the grams of fat within the foods they choose to eat and the marketing campaigns of companies trying to cash in on the current low fat trend. It's a bad combination.

To become lean, you have to quit looking only at the grams of fat on the labels and you have to focus on the percentage of fat within each food. Food manufacturers today are very aware of your attempt to cut back on fat. In an effort to give you what you want, manufacturers have simply developed marketing techniques that can make high fat foods appear to have low numbers of fat grams. The only way to determine whether or not a food is really low in fat is to look at the percentage of fat within a food, not the grams of fat.

Before I explain how easy it is to determine the percentage of fat in food, let's discuss why it's important. First of all, almost all research conducted on individuals concerning food and its effect on overall health use the percentage of fat as opposed to grams of fat actually eaten. This is an important distinction because a food can state that it has "1 gram of fat" and still be a 50% fat food! Let's learn how to determine the percentage of fat within a food.

The Fat Formula

To determine the percentage of fat within a food, locate the number of calories from fat listed on the label. Now take this number and just divide it by the total number of calories. It's that simple. Let's use the fat formula on the following label from a package of lean ground turkey. But first, look at the front of the packaging.

The legal definition of consumer fraud is, "the deliberate intent to deceive one, for the financial gain of another." Although this label would appear to fit the definition of consumer fraud, it is not considered fraud because this company is labeling their product according to the FDA's laws. It's frustrating because the FDA creates definitions that are somewhat different from our dictionary's definition. Let's face it, you cannot be an obese lean person, and yet, the word lean does not mean low fat under the FDA's rules.



Look at the label and locate the calories from fat. In this example, it's 70. The calories are 160. Now let's plug this into our formula:

Calories From Fat = % Fat

Therefore

70 = .44 or 44% Fat

Total Calories

160

Using the fat formula, we know that this ground turkey contains 44% fat, which is a high percentage of fat for a food. Okay, let's go back in time. Remember the junior high school math we thought we'd never use again? Guess what, we use it here! Just drop the decimal point and look at the first two numbers (this equals the percentage of fat).



Now let's look at another example using the same brand. As you look at the cover of this label notice that it claims to be 1% fat.

A good rule of thumb is to always divide the smaller number (the calories from fat), into the bigger number (the total calories). Using the fat formula:

15 calories from fat divided by 120 calories = .13 or 13% fat.

Here we have identical brands, both appear to be good choices, and one ends up being high fat while the other is low fat. So what's the difference between this ground turkey and the one that we looked at earlier? Notice this one is made from only breast meat. It's rather ironic that on this package they are more than happy to advertise (near the bottom of the label) that this one contains "no skin." Obviously this is the product you would want to use. Be careful though. One classic mistake that a "dieter" would make is they would wad this ground turkey into a patty and toss it on the grill, which will leave you unsatisfied. Remember, you have to love what you eat. Add things like BBQ sauce, diced onions, minced garlic, and egg whites to add moisture to your food.

Try To Keep Most Foods Under 20% Fat!

The golden rule of healthy eating is to keep most foods under 20% fat. This doesn't mean that you can never eat a food that contains 50% fat. It just means that you should center your eating around foods that are under 20% in fat most of the time and serve higher fat foods only occasionally.

Okay, let's test our new knowledge. All red meat is higher than 20% fat. Does this mean that you can never eat red meat? Not at all. Just realize that red meat should be rotated into your diet occasionally, maybe once a week or less. If each food is under 20% in fat, your entire day's worth of eating is also under 20% in fat.

I know what you're thinking, "It's a hassle to do math every time I shop." But the sad fact is, our Food and Drug Administration (FDA) and USDA have chosen not to include the percentage of fat on labels for the simple fact that many consumers would avoid them if they knew this percentage. You have the food industry lobbyists to thank for that. So, at least for now, you may need to carry a small calculator to the store when you shop.

Many health authorities feel that this formula should be used for your entire daily eating program rather than for individual foods. The flaw in this thinking is that you can eat high fat foods and then balance it out by eating low fat foods the rest of the day. I disagree. Suppose you ate a stick of butter for breakfast, which is 100% fat, and then ate 10 cups of rice, which contains no fat. Averaged out, you would have eaten about 25% fat for the day. But would you really consider this healthy eating? The bottom line is this: If you eat a really high fat food, the fat from that food will be transported to fat cells. Eating less fat the rest of the day won't offset the high fat intake from earlier. Rather than counting grams of fat and calories, just make sure that the majority of foods you eat fit into the 20% guideline. It just makes good sense to try to cut back on your fat consumption. And any breakthrough diet book that suggests otherwise needs to be tossed in the trash. This advice isn't just about dropping body fat, it's about reducing your risk for heart disease, cancer, diabetes and a host of other ailments that are linked to high fat diets.

Did you know that one 12-ounce T-bone steak contains as many calories as all these foods combined?

A 12 oz. T-Bone Contains as Many Calories as:

- *12 Ounces Of Broiled Fish*
- *2 Baked Potatoes with Sour Cream*
- *1 Large Dinner Roll*
- *1 Dinner Salad*
- *2 Cups Of Coffee with Cream & Sugar*
- *1 Small Dish of Ice Cream*

Most people can finish a 12-ounce T-bone steak along with a loaded baked potato and a dinner salad and a glass of wine. But they would struggle eating the same number of calories in low fat foods. What I want you to understand from my examples is this: by reducing your overall fat intake, you can still eat a lot of food without ingesting as many calories.

While keeping your fat intake at or below 20% is sound advice, eating too little fat may not be healthy for growing children below the age of two. Adults would benefit by eating a diet consisting of 10 to 15% fat. Children, however, are better off with a guideline that provides enough fat to grow properly but not enough to risk their health or cause a weight gain. It's also extremely important never to place toddlers or children under the age of two on a low fat diet because it could possibly prevent growth, and normal development. But children above three years of age develop very healthy bodies on 20% or less fat. This does not mean that you have to cook higher fat foods because you have small children. You should still cook low fat meals but also add a glass of whole milk to your child's meal. That will give them all the fat they need. In addition, you could place some higher fat condiments on the table to add to your child's plate instead of adding the fats directly into your cooking.

Fake Fats

Just before biting into a fat free piece of cheese, have you ever wondered, “what on earth is this stuff actually made from?” The answer: fat substitutes, or better yet, what I refer to as “fake fats.” Now ask yourself, “Do these fake fats really taste and act like fat?” After all, have you ever tried to melt Ultra Light Promise Margarine? Go ahead. I dare you. The fact is that a good size hunk of melted Promise Margarine can make a pretty darn good hockey puck. It’s not that Promise is a bad product. I really like it. However, like many fat substitutes, you can’t subject it to many different temperatures. There are many different types of fat replacers derived from a variety of sources; and no single fat substitute is that versatile. Replacing all the attributes of fat is very complicated because fat has physical properties like texture, lubricity, viscosity, and structural stability that contribute to the overall texture, appearance, and flavor of the product. Furthermore, fat is not a single compound; but rather a family of triacylglycerols consisting of three fatty acids, with saturated or unsaturated chains, that consist of between 8 and 18 carbons. Depending on the combination of the chain lengths and the degree of saturation, fats will possess very different physical properties. Consequently, fats can accommodate very different uses. A fat substitute can be manipulated to mimic some fat properties depending on its chemical structure and how it is physically processed. Unfortunately no one fat substitute can do all the assorted things that normal fats can do. But most of us want a fat free product to taste like the regular product. You might buy a product once but if it tastes horrible you are unlikely to buy it again.

As concern about health and nutrition has grown over the years, manufacturers have scrambled to produce as many low fat and fat free foods as possible. However, manufacturers understood from the beginning that people didn’t want to give up their favorite foods even though these foods were naturally “high” in fat. Instead of changing their diets to include foods naturally low in fats they wanted to as mentioned earlier in the Better Bad Choices, continue enjoying the same foods they have always eaten with the fat removed or replaced. So manufacturers responded by creating a new breed of calorie and fat reduction agents that now account for more than 30% of the 4 billion dollar market for food additives. Fat substitutes are divided into three categories, carbohydrate-based, protein-based and fat-based.

Carbohydrate-Based Fat Substitutes

Carbohydrates (or starches) contain fewer calories per gram than fats. They contain 4 calories per gram while fat contains 9 calories per gram. Starches can mimic the bulk and texture of fat when mixed with water to form bland gels; and because water makes up the majority of these mixtures, the number of calories can be reduced to 1 calorie per gram or less. In fact, these mixtures can often replace up to 100% of the fat in many foods.

Carbohydrate-based substitutes are usually sold as powders, which have a longer shelf life and are easier to handle than premixed gels. Food processors mix the powder with water either before or after mixing with other ingredients. When the mixture is heated, stirred, and cooled, it stabilizes water into a gel-like, “fat like” structure that is heat stable and can be used in baking. However, it cannot be used in frying because it will melt at high temperatures. The gel-like product that results after mixing the powder with water is “gum.” You may have noticed these gums when reading labels. Examples of carbohydrate-based fat substitutes are the modified food starch, polydextrose, cellulose, dextrin, maltodextrin, and various gums like xanthan, locust bean, guar and carrageenan.

One example of the diversity carbohydrates can be seen by looking at Oatrim (also called LEANesse). This fat substitute is derived from the enzymatic treatment of oat flour and oat bran. This particular product gives foods a creamier taste and texture than other fat replacers and is often used in salad dressings, baked goods and ice cream. It may also come as a surprise that this fat replacer is added to some ground beef mixes. For example, ConAgra’s Healthy Choice Extra Lean Ground Beef and McDonald’s McLean deluxe beef patties are made with this fat substitute. While extra lean ground beef contains about 270 calories and 20 grams of fat, the same serving size in Healthy Choice Beef contains 130 calories and 4 grams of fat. As you can see, a fake fat can dramatically reduce overall fat and calories.

Protein-Based Fat Substitutes

There aren't very many protein based fat replacers available in America. In fact, Simplesse made by the Nutra-Sweet company is currently the only protein based fat replacer available in the U.S. It is sold in either liquid or powder form; and is used in everything from dairy products like cheeses, and ice cream, to salad dressings and mayonnaise. This substitute is made from egg white protein or milk protein. Since proteins break apart under heat, most of these proteins can only be used in cold food products and a few baked goods. It cannot be used in extreme heating like frying. Protein-based substitutes are designed to mimic the lubricity of fats by breaking down the protein into very small particles. These tiny particles are perceived in the mouth as "creamy." Like carbohydrates, proteins contain fewer calories than fats, a mere 4 calories per gram, and the fat replacers derived from proteins contain only 2 calories per gram.

Fat-Based Substitutes

Fat-based substitutes are fatty acids that have been chemically altered to provide fewer or no calories. The theory is that by altering the size, shape, or structure of fat like molecules, the human body will metabolize them to a much lesser extent, if at all. For example, for the last 13 years or so, Procter & Gamble has been working on a fat-based substitute that could be used in frying. It is called Olestra, a substance containing six to eight fatty acids esterified to sucrose instead of glycerol. These fatty acids are derived from vegetable oils. Due to this unique property, Olestra possesses all the normal characteristics of normal fats. Furthermore, Procter & Gamble claims that its product passes through the digestive tract unchanged and unabsorbed. Since Olestra is a bigger fat molecule, it is not hydrolyzed by digestive enzymes. So, theoretically, you could fry potatoes, eat them and only receive the calories from the potato. The fat will pass through the body unabsorbed. Likewise, with snack foods like chips, one would only receive the calories from the potato and not the fat!

Critics contend that Olestra is bad because it carries the fat soluble vitamins out of the body. In addition, it tends to pass through the body unabsorbed which can cause some anal leakage. Sounds pleasant, doesn't it? However, that's only going to happen when large amounts are eaten at one time. So if you tend to eat an entire bag of chips in one sitting, you may need to have a pair of Depends on hand. But on the other hand, these chips really do taste good and in normal portions, do not produce problems. So what's worse, the potential for obesity and heart disease or the loss of a few fat soluble vitamins that can be replaced by taking a multiple vitamin. I suggest you try the new WOW chips and see how you feel.

Another currently available Procter & Gamble fat replacer is called caprenin. It is a reduced calorie fat. It differs from most fats because it contains only 5 calories per gram instead of the normal 9 calories per gram. Caprenin is very similar to cocoa butter; so it can be used in any recipe that uses cocoa butter as a main ingredient. It is used often in candy bars because it provides a rich, creamy taste like cocoa butter.

There are a lot of other fat-based replacers in the works. For example, Arco Chemical is working on esterified propoxylated glycerol's (EPGs). Frito-Lay is working on dialkyl dihexadecylmalonate (DDM), and Pfizer has begun marketing Veri-Lo. Each of these fat replacers has different properties, but is based on the same concept: to provide a product that replaces fat that contains fewer calories or is not metabolized at all.

In the beginning, fat-based substitutes were looked on with great promise; however, since carbohydrate-based substitutes have proved to be so successful the fat-based substitutes have lost some of their appeal. To date, very few of these fat substitutes have gained approval from the FDA and their future doesn't look very bright.

"Fake" fats haven't produced the thin country we once thought that they would. With so many "Better Bad Choices" now available, why do we continue to get fatter? Unfortunately, many "fat free" products contain almost the same number of calories as the regular food!



Meal Frequency

Eat foods you enjoy and don't force feed.

By now, the idea of eating smaller more frequent meals should make more sense than eating fewer large meals. We have seen how eating one or two large meals a day causes abdominal distension and increased stores of body fat. In addition, it should be apparent that eating more often helps give you control over food by avoiding hunger. I am often asked, "Should I eat even if I'm not hungry?" And the answer to that is a resounding "YES." If you eat before you

get hungry, you will never feel hungry, and control over food is easier. Throughout this book we haven't really talked about how eating more small meals helps you lose weight. The key is what smaller, more frequent meals do for you metabolically. Although this may be hard to study because people cannot be caged like rats, the overwhelming effects have been demonstrated during my years working with hundreds clients.

The critics that think smaller meals do not help your body burn more calories may be wrong because they do not understand the types of foods that should be eaten. Perhaps they are still operating under the belief that a calorie is a calorie and that the more times people eat, the more calories they consume. Or perhaps they still fall prey to the assumption that calorie consumption is a much stronger determinant of weight then the timing of meals and the types of calories that you eat. Let's face it, if their subjects were eating smaller meals that consisted of refined carbohydrates like pasta, breads, pretzels, fat free crackers and baked chips, or eating an unbalanced diet without much high quality, low fat protein, and the result would make anyone question the idea of eating more often. But when small meals are balanced correctly, coupled with nutritious nibbling, weight control is easy. So let's take a look at how small meals exert their beneficial effects on weight loss, energy and hunger control.

One advantage of eating more often is the energy that is provided from the ingested food. How far do you think a long distance runner could run if he only ate one meal a day? How far could he go on two meals a day? The answer is obviously not very far. But with the addition of each meal his energy and ability to endure would improve. So, just how do small meals improve energy? It's my belief that our bodies can only assimilate small amounts of food every three hours.

Diabetic research has shown that to keep blood sugar levels stable, a diet has to provide the body with food at regular intervals, which seems to be best in about three hour increments. If the food is low in fat, the body will digest and absorb the majority of the stomach contents within three hours. Have you ever noticed that infants cry every two or three hours for more food? This frequent ingestion of food allows us to stabilize our blood sugar, which helps avoid the lull a lot of people feel by mid-afternoon. You get a more sustained release of energy from a balanced mini-meal that contains a complex carbohydrate and a low fat protein then you will from a piece of candy or nothing at all. On the other hand, large meals tend to overload your digestive system and cause you to feel more sluggish.

A mini-meal consisting of light yogurt or a piece of fruit really is not enough food. The meal needs to contain more balance. Try mixing together a light yogurt with uncooked oatmeal and a couple of tablespoons of raisins. The oats will absorb the moisture from the yogurt and the raisins will swell up leaving you with a snack that is sweet, filling and much more satisfying. Further, the oatmeal will slow down the entry rate of the food and leave you more satisfied.

Another reason that smaller meals work better than larger meals is the effect that smaller meals have on your waist size. Large meals tend to overload your digestive tract with too much food at one time. This in turn can cause abdominal distention to occur. You remember our good friends Jim and Bob? They obviously ate one or two large meals a day. Once the girth of the waist enlarges, it remains somewhat enlarged. No amount of the “abdominizer” or sit-ups will get rid of the excessive girth that results from constantly over-stuffing yourself.

The really big advantage of eating smaller meals lies in the fact that your metabolic rate can be altered by eating more often. This is called the Thermic Effect of Foods. I’ve mentioned this before, but it bears repeating. Eating complex foods like chicken and turkey breast, whole grains, and foods that are low in fat, requires a longer time to digest and assimilate. The calories that are required to break down and transport those foods come from your own body. The more complex the food, the more calories have to be used to do the work of breaking down, transporting and assimilating the food. That’s why oatmeal requires more calories to digest than Fruit Loops. Also, let’s not forget that eating more meals will allow you to ingest a greater variety of foods, which will lead to better health and longevity.

Understanding your high-risk situations is vital to your ability to successfully change behavior. If you were a drug addict trying to give up drugs, would you still hang around your drug buddies? If you did, how successful do you think you would be? Obviously, you would not be very successful. The same example applies to eating, dieting, weight loss or whatever. Know your high risk situations and put into place the coping skills that will allow you to succeed. This is perhaps the greatest benefit to eating more often. You see, hunger is the biggest high risk situation there is to anyone that is trying to exert control over food. Once you get hungry you find yourself throwing everything you know about nutrition right out the window while screaming, “Just give me food! I don’t care what it is! Just give me food now!” That’s right. Once you expose yourself to hunger, it’s all over. Control vanishes at the first moment your eyes meet anything that even remotely looks like food. I am amazed at how many people want more willpower but aren’t willing to carry food with them. Think about it. It would be like a drug addict trying to give up drugs but who is unwilling to stop spending time with his drug buddies!

So, how many meals should you eat? Well, that all depends on your athletic level, time constraints and weight goals. For example, if you are an elite athlete, like a bodybuilder or long distance runner, you should be eating 5-6 meals a day. If you are trying to lose weight and just want to be healthy, try eating four meals a day. It’s my belief that no one should eat only three meals a day. It just isn’t enough to prevent hunger, stimulate the metabolic rate and supply the body with enough fuel for high energy levels. You need to ingest a greater variety of foods, which will lead to better health and longevity.



The Eating Program

What I want to do in this section is show you how to precisely put together an eating program that you will really enjoy, and feel so good about that you'll want to keep doing it. But before we begin, you need to understand how important it is for you to do the things I ask. Consider me to be your coach. Let me coach you on what utensils to have on hand so that cooking can be fast and easy. Then I'll take

you through a typical day of cooking so that you can share my vision on just how easy eating right can be. To help you get started, I decided to set everything up in phases so that you can follow along. All you have to do is follow each phase one at a time. Whatever you do, don't jump ahead or skip a section. Just do everything I ask you to do, in the order I ask you to do it. Even if you already know how to cook, follow my instructions because you may learn a few easier tricks. Remember, I'm going to be your coach, so let's be a team and follow my advice. Don't try to do everything in one day. Simply take things at your own pace and let's make sure we are moving at a pace that makes you feel comfortable.

Remember making "better bad choices?" The best way to start your new lifestyle of health is to start by making sure the foods you buy at your grocery store are better than the foods you used to buy. Go through your pantry and determine which foods are high in fat that can be replaced with lower fat alternatives. For example, you may find cans of soup that are in the 50% fat range. As you shop, look for the lower fat varieties. Instead of buying so much beef, maybe you can purchase more chicken and turkey breast along with a little shrimp and seafood. Also, maybe the beef you buy this time is a lower fat cut like top round instead of T-bone. The examples are endless, but you get the point. Start finding foods that contain less than 20% fat and slowly stock your cupboards with more of them.

Phase One

Cooking Essentials

The first thing you should do is make sure that you have the right cooking utensils at home. This is going to make your job 100% faster and easier. And if you are concerned about buying new kitchen utensils, don't be. Since this is going to be an eating plan that you want to do for life, if all goes as planned, you will be using them for years to come. Consider it an investment in your health. Take an inventory and buy only the things you don't have. I'm assuming that you have the normal things like an oven, refrigerator and stove etc. Also, don't feel like you have to buy everything all at one time. Maybe you can make small purchases over the course of a year. Ask for some of these items as gifts for Christmas or your birthday. The following is a list of the items that I have found to be very helpful:

A Rice Steamer

This little contraption will make a giant batch of rice in minutes flat. All you have to do is dump in the maximum amount of rice and water that it holds, plug it in and wait about 20 minutes. Pow! You now have enough rice to feed China. Store it in a Tupperware container and stick it in the refrigerator. It will stay good for at least one week. Here are a few tips: After about three days the rice becomes hard and dry. But don't worry. When you heat a

bowl of rice in the microwave for two or three minutes, it pops back to life as if you just cooked it for the first time. Now, here's the nice thing about owning a rice steamer. Instead of always cooking rice, try the following: barley, couscous, bulgur, wild rice, Jasmine rice, Texmati rice, Sweet rice, Basmati rice, Valencia, Arborio, Asian, Black rice, or any other grain you want to cook in a hurry. Also, instead of steaming the rice in water, use de-fatted chicken or beef broth. It will color the grain yellow and add a really nice flavor to whatever grain you use. One more tip: try tossing dried cherries or cranberries into the rice as soon as it's done cooking. It will add a splash of burgundy color and a really nice bite to whatever grain you steam.

A Microwave

Do you remember the days when you had to bake a potato in the oven? Geez, it took an hour. Well now, a microwave can cook several potatoes in a matter of 15 minutes or less. You need to have a microwave at home and one at the office. If your office doesn't have one, get one. This way you can eat really good tasting, hot meals at work. This is particularly important during the winter months if you live in the North. I always liked hot meals during the winter. Don't forget, oatmeal is cooked in 2 minutes, egg whites can be poached in 1 minute, entire meals can be reheated in 3 minutes. Boy, what a great invention!

Teflon Cooking Utensils

These nonstick pots and pans will allow you to cook foods without using much oil. You should never place them in your dish washer; just run them under hot soapy water, rinse and dry. They are really easy to clean and allow you to cook anything low fat. Be sure to buy a small, medium and large frying pan, plus a medium size sauce pan and one large pot (the kind you would cook spaghetti sauce in). Also, be sure to purchase sponges that are designed for Teflon cookware. Don't use steel wool or any harsh abrasives on the cookware since they will remove the coating.

A Food Processor

This little contraption can dice, slice and julienne any vegetable in seconds. But wait, that's not all! Since you started reading this book before midnight tonight, you'll also receive this free...(see what watching too much television will do to you)? It can save a ton of time as far as slicing vegetables goes. I recommend that you do all your chopping at one time and store the chopped, diced or sliced vegetables in Tupperware containers. Then, when it's time to cook, simply pull out the container that has the vegetables you need and toss them into your favorite recipes. The food processor also works great on meats. Do you realize how fast you can make meals from leftovers? Let's suppose you cooked chicken breast for dinner. You can cook 10 chicken or turkey breasts in the same time it takes to grill one. Before you finish cleaning the kitchen, toss the cooked breasts into the food processor, add in your diced celery, onions, garlic powder, mustard, dill seasoning and relish etc. Flick on the switch and within one minute you just made a giant batch of chicken or turkey salad. Place the chicken salad in a Tupperware bowl and later you can use it on sandwiches, stuff it into a bell pepper, stir it into rice or even place it on a bed of lettuce.

A Blender

You'll agree that with all the new meal replacement powders on the market today, a blender sure can be handy. In addition, many of the egg white recipes (like the pancake recipes) require you to blend certain ingredients together. Here's one example of a quick, great tasting breakfast. Try placing 4 egg whites in a blender. Add 3 tablespoons of low sugar jam (try strawberry) and ½ cup uncooked oatmeal. Blend for about 30 seconds. Pour the mix into a preheated Teflon pan. Cover and cook over medium heat for about four minutes. Turn the pancake over for one minute and out pops a strawberry pancake! Simply by changing the flavor of the jam, you change the flavor of the pancake. We'll talk more about this later!

Tupperware

If you want to make your life easy, buy various sizes of Tupperware containers to store leftovers and to pack lunches. Buy the kind that stacks inside the other containers. They take up less space and are easier to store.

A Small or Medium Sized Lunch Kit or Cooler

It's common sense that a 30 gallon cooler isn't going to be very easy to carry to work. So make sure you have a lunch kit that suits your needs. Also, be sure to purchase the reusable plastic freezer ice packs to keep your food cold. I don't have a refrigerator at work, so I keep a frozen plastic ice pack in mine and my food stays stored at the right temperature. Since the ice pack is reusable, it's a one-time purchase. Just a side note here: I suggest that you buy two ice packs. I can't tell you how many times I've forgotten to remove the ice pack from my cooler at the end of the day, only to wake up the next morning to find it still in my lunch kit.

A Crock Pot

The really nice thing about owning a slow cooker is the fact that you can dump a multitude of ingredients into it in the morning, turn it on low and when you come home in the evening an entire pot of food is waiting for you. Now just dump some in a bowl and eat. Nothing can be faster or easier than cooking with a slow cooker.

A Gas Grill

Boy, this thing makes cooking fast and easy. Best of all, when you cook fish your house won't smell like a barn. You can turn it on, light a match and grill tons of fresh meats and vegetables, and you won't leave a massive amount of dirty pots and pans in your wake.

Phase Two

Cooking The Right Foods

You should plan on shopping once a week. Set aside a day that fits into your schedule and make a list so that you don't forget anything. I'm providing this list for you to help you get started, but you should feel free to add or subtract from it depending on what you already have in your cupboards. A shopping list is located on the next two pages. It can be photocopied and placed on your refrigerator. When you use the last of a product, simply circle it and by the end of the week you will know exactly what products have been used and need to be replaced. Don't be locked into specific brand names. Some supermarkets carry similar products, just different names.

Remember that most of the foods you purchase should be under 20% fat. A few foods may exceed that level of fat and that's okay. For example, if you really like red meat, and all red meats are above 20% fat, simply purchase the better bad choice by buying the eye of round or top round. They are the leanest cuts of red meat and, as we already discussed, they would be better bad choices over the higher fat cuts you had been buying in the past.

Another thing to keep in mind is that most of the perishable items in a grocery store are always located on the outer perimeter of the supermarket. All the processed and refined foods are in the aisles. Have you ever noticed that all the fruits and vegetables, fresh meats and dairy products are always located along the side and rear walls of the grocery store? The reason for this is twofold. On one hand, it's easier to place these items near the electrical outlets for refrigeration. On the other hand, it forces you to walk up and down each aisle so you will purchase more items. It just makes good sense that if you want to be lean and healthy, most of the foods you buy should be coming from the outer perimeter of the supermarket.

Beginning Shopping List

Beverages

- *Crystal Light or Nutra-sweetened Kool Aid*
- *Decaffeinated tea bags to make iced tea*

Note: Try the flavored herbal blends that come in apricot, apple, raspberry and a host of other flavors.

Breads

- *12 packages of light whole wheat bread and/or pita bread*
- *Canister of quick cooking oatmeal*
- *Box of grits or cream of wheat*
- *Package of pasta*
- *Bag of pretzels*

Note: English muffins, pita, and bread can be frozen to avoid perishing; although these foods are healthy and low in fat they should still be limited because they are made from refined flour

Condiments

- *Dill relish*
- *2 jars of low sugar preserves (like Smuckers or Polaners All Fruit)*
- *Jar of fat free mayonnaise*
- *Light soy sauce*
- *Light teriyaki sauce*
- *Mustard*
- *Catsup*
- *Knorr's Vegetable Soup Mix*
- *Fat free salad dressings (like Ranch, Thousand Island, and Italian etc.)*
- *Jar of picante sauce*
- *Cooking spray*
- *2 - 3 cans tomato paste (try Hunt's Mexican, garlic, chili or Italian flavored)*
- *4 - 5 cans of no fat chicken broth*

Dairy

- *6 light yogurts*
- *1-2 packages of fat free cheese (try grated, sliced, or both in cheddar, mozzarella or Swiss)*
- *Canister of fat free Parmesan cheese*
- *Fat free cream cheese (only if you think you will use this within one week after purchasing)*
- *Fat free sour cream (once again, buy this if you think you will be using it before the expiration date)*
- *2 dozen eggs or egg beaters (frozen)*

Fruits

- *Can of pineapple in its own juices*
- *Jar of low sugar apple sauce*
- *Fresh fruits that you like (count how many pieces of fruit you will eat each day and multiply it by seven)*

Grains

- *1 bag of popcorn*
- *2 bags of rice (try Jasmine rice and a bag of brown rice)*
- *2 cans of black beans*
- *1 can kidney beans*
- *1 package rice cakes*

Lean Meats

- *1 - 2 pounds skinless chicken breast*
- *1 - 2 pounds of skinless turkey breast*
- *1 - 2 pounds of ground turkey breast*
- *1 pound shrimp*
- *2 cans of water packed tuna fish*

Note: All these meats can be frozen. Just thaw them before cooking by leaving them in your refrigerator overnight or in the microwave on low defrost setting for about 8-10 minutes.

Spices

- *Baking powder*
- *Basil*
- *Chili powder*
- *Celery salt*
- *Cornstarch*
- *Dill*
- *Garlic powder*
- *Garlic salt*
- *Minced onion*
- *Parsley*
- *Salt and pepper*
- *Italian seasoning*
- *Cinnamon and nutmeg*
- *Tony Cachere's Cajun seasoning*

Snacks

- 2 boxes of Nutra-sweetened Jell-O
- 2 boxes of Nutra-sweetened Jell-O pudding mix
- 1 bag of baked potato chips or tortilla chips
- 1 or 2 pints of frozen yogurt or fat free ice cream

Vegetables

- Celery
- Lettuce
- 3 tomatoes
- Onions (either white, red or scallions)
- Bell pepper (try yellow, red and green)
- 4-5 baking potatoes or yams or a combination of both
- Carrots, peas or other frozen vegetables
- 1 can of sliced water chestnuts
- 1 bag of Ore Ida shredded potatoes (Hash Browns)

Note: Avoid canned veggies, but frozen are okay.

I know it would be very expensive to purchase everything on this list. The key here is to choose the items that you need or want to have. Scratch off the stuff you don't want. Also, keep in mind that you won't be using everything in a week or even in a month for that matter. All the seasonings are purchases that are made occasionally. The frozen vegetables and any meats you don't use the first week can stay frozen until you use them. The same thing goes for canned beans, water chestnuts and many of the other foods. In addition, the quantities you buy depend on how many live in your household.

Phase Three

Cooking

Now that you have all the right cooking utensils and your cupboards are loaded with healthy foods, let's start things off by allocating one or two days a week for cooking. My preference is to cook on Sunday and Wednesday nights. The foods I cook on Sunday will provide me with leftovers until Wednesday. Then I cook enough food once again on Wednesday night which lasts me until Saturday night. You can choose whatever two days that you think work best for you. But until you can develop a better plan that works for you, try doing it my way for the first few weeks.

The Healthy Chef Cookbook is filled with great tasting, low fat recipes. Depending how many people are in your family, you may have to double or even triple some of the recipes so that you have enough leftovers for your lunches and snacks. The purpose of this homework assignment is to teach you that large amounts of food prepared ahead of time can be fast and gives you the control that you want over food and hunger. You'll also discover that carrying foods to work isn't as hard or difficult as it may sound. In fact, I think that once you follow through on this exercise, your eyes will be opened to the idea that bringing foods is the only way to curb hunger, and help you transform your body. Okay, let's get started. Here are the items you are going to need for your first batch of food. Let's make a batch of rice and turkey chili.

Step One

Place 5 cups of rice in your rice steamer and add ten cups of defatted chicken broth. Cover with the lid, plug in the steamer and flick the switch on cook. Now wasn't that easy?

Step Two

Get your large Teflon sauce pan (the kind you would cook spaghetti sauce in) and spray the inside with butter flavored cooking spray. Turn the heat on medium. Unwrap 2 pounds of ground turkey breast and place the meat into the sauce pan. Using a wooden spoon, break the meat apart and continue to work the meat as it cooks with the wooden spoon so that the turkey breast crumbles into small chunks. Stop stirring the meat periodically to add in some seasonings. Sprinkle in three or four tablespoons of chili powder. Add one tablespoon of garlic salt, some pepper and one or two tablespoons of Tony Cachere's seasoning. Once the turkey is browned, add 2 cans of defatted chicken broth and two cans of Hunt's chili style tomato sauce. Stir well. Add in diced carrots, celery and, if you like onion, dice one and add in as much as you like. If you like beans, add in one can of either black beans or kidney beans (this is optional). Bring the mix to a boil. Reduce the heat. Cover and let simmer for about 5 minutes.

Now, place the big pot of steamed rice and turkey chili in the refrigerator. The next morning, before work or before you go to bed, place one or two cups of rice in a Tupperware container and cover with a cup of the turkey chili. Personally, I bring two Tupperware containers filled with rice and chili with me to work. I will eat one at 12:30 and the other at 3:30. As you should now be able to see, you cooked a lot of food in a very short period of time. Don't just be locked into placing the turkey chili over rice. Try it over a baked potato or wrapped in a fat free flour tortilla. Now the key is to alter recipes so that you don't get bored by eating the same foods every day. On Wednesday night make the turkey breast meatloaf. Now you can take a meatloaf sandwich to work with you on Thursday. Then on Friday, place the leftover meatloaf over a bed of rice or baked potato. The following Sunday, make the Shrimp Jambalaya. It's different, spicy and depending on how much you want to make, will stay good for about five days.

Putting it all together

Now it's time to put all of the pieces of the puzzle together. I could go into elaborate formulas on how to figure out exactly how many calories you need to eat every day. But instead, let me show you four examples of how you should eat. You just need to decide which category you fall under and set up your own eating program using the outline that fits your goals. Simply by using the recipes in the cookbook portion of this program, locate a breakfast, lunch, snack or dinner that you would really enjoy eating. Remember, this outline merely shows you one example of hundreds that you could set up for yourself. If the outline calls for four meals and one snack, choose the foods that fit the parameters outlined in this program, decide what you want to eat and set your program up to revolve around four meals and a snack. On the other hand, if the outline you choose calls for six meals a day, then you decide which recipes and foods you like and set up your program to fit the amounts and meal frequency laid out in the outline. But as you look at the outline, realize that there are an endless variety of things that you could slip into this eating program. For example, let's say that lunch calls for 4 ounces of lean meat, a fist size serving of starch and veggies. A person with a dieter's mentality would see a grilled dry chicken breast, a dry potato and steamed broccoli on a plate. That's the furthest thing from what I have in mind when I write out an illustration like that. If you really share my vision of a great eating program being filled with wonderful foods, why not place 4 ounces of tuna salad (made with water chestnuts, diced celery, onions, dill seasoning, dill relish, pepper and garlic powder) between two slices of toasted whole wheat bread, and top it with lettuce and tomato! Now that's a hearty meal and it matches the outline perfectly. Also, since you are supposed to have a mini meal in the mid-afternoon, why not have another sandwich, but just have a half. Now I know what you are thinking, "I'll never lose weight on that." Since you made one sandwich for lunch, another half would take very little extra time and by eating the half sandwich three hours after lunch, the Skittles and Fritos won't look as appetizing at 4 o'clock! Once again, the idea of eating smaller, frequent meals helps stop you from under-eating, which by the way leads to overeating. That's a direct quote from my good friend and world renowned personal trainer Larry North.

Now let me show you a few sample menu plans. On the left side of the page is the sample outline showing you how to pattern and balance your meals. On the right side of the page is an illustration of what kind of foods could be used in the outline. This sample eating program represents one of an endless variety of things you could eat for the various meals.

If you are a female, and your goal is to drop body fat and/or be healthy, then this outline is for you.

Example

Breakfast

*4 egg whites
1 serving oatmeal*

Mid-Morning

1 fruit

Lunch

*4 ounces of lean meat
Fist size portion of carbohydrate
Veggies*

Mid-Afternoon

Mini-meal

Dinner

*4 ounces of lean meat
Fist size portion of carbohydrate
Veggies*

Sample

Breakfast

Egg white strawberry pancake

Mid-Morning

Banana

Lunch

*3/4 cup turkey chili served over 1 cup rice
Salad with fat free Ranch dressing*

Mid-Afternoon

Yogurt, oats and raisins

Dinner

*Shrimp jambalaya rice
Broccoli with fat free Parmesan cheese*

Evening

*Fruit salad: 1 cup made with
oranges, banana, apple, & grapes
Served over plain yogurt
2 packets of Equal*

Use the Healthy Chef Cookbook for more ideas and illustrations. A good guideline to help you understand how much food to eat is by using your hand size. Look at your hand. Whenever you have a piece of low fat protein, like chicken or turkey breast or fish, it should be the size of your hand. Now close your hand and make a fist. Whenever you have a low fat starch like potato, yam, rice or beans, it should be about the size of your fist. The great thing about this little tip is that the amount of food changes depending on the size of the person. I listed the amounts of food in ounces and servings; but, using your hand will work just as well.

Using the same outline, this is what the eating program would look like for a male that wants to drop body fat and be healthy.

Example

Breakfast

*5 egg whites
1 serving oatmeal*

Mid-Morning

Mini meal

Lunch

*6 ounces of lean meat
Fist size portion of carbohydrate
Veggies*

Mid-Afternoon

Mini-meal

Dinner

*6 ounces of lean meat
Fist size portion of starch
Veggies*

Evening

1 fruit

Sample

Breakfast

*Egg whites and salsa
Fat free hash browns*

Mid-Morning

*Fat free cottage cheese
Topped with sliced peaches*

Lunch

*Grilled chicken breast
Smothered in steamed spinach and garlic
with a spicy tomato sauce
Baked potato topped with catsup*

Mid-Afternoon

*Light yogurt
Sugar-free Jell-O*

Dinner

*Turkey meatloaf
Fat free mashed potatoes
Dinner salad with
Fat free Ranch dressing*

Evening

*Fruit salad: 1 cup made with
oranges, banana, apple, & grapes
Served over plain yogurt
2 packets of Equal*

Some people like to omit the starch at night and add more veggies to help them drop body fat faster. If that sounds like something you would like to do from time to time, feel free. Just don't get caught up with the idea that you can never eat starch at dinner. Also, while that eating program may look like a lot of food, it's actually very low in calories because of the quality of food and the low fat content. By using the recipes in the Healthy Chef Cookbook, you have lots of options for breakfast, lunch and dinner. Just choose whatever sounds good to you. Also, what if you hate egg whites? What if you are lactose intolerant and can't eat yogurt? Don't fret, just use the Healthy Chef Cookbook and decide what you would like to have.

If you are a female or male athlete and you run and/or weight lift, I might suggest eating more than the outline above by simply dropping a meal replacement in place of the mid-morning and mid-afternoon mini meals. For female athletes, you should have a mini meal at the mid-morning (like the half sandwich or yogurt oats and raisins) but have a meal replacement powder during the mid-afternoon. Guys could place a meal replacement at both the mid-morning and the mid-afternoon and put a mini meal like low fat cottage cheese at the evening spot.

A Word About Meal Replacements

If you haven't heard about meal replacements, then stop by your local health food store and ask them to show you one. These are a new breed of powders that can be used in place of a meal. They are fast, convenient and actually taste good. The nice thing about these is that they can be mixed in the morning, placed in a container or Thermos, and used as a meal during any time of the day.

Now, I'm big on using solid foods first, but a lot of people like the idea of drinking a meal in the middle of the afternoon at work because it's fast and easy. They are also easy to carry when you travel and can be used in place of breakfast if you overslept. There are a few people that should not use them though. If you have kidney disease, hemorrhoids, colitis, Irritable Bowel Syndrome, or any medical problem that requires a low protein diet, don't use meal replacements.

If your goal is to lean down and drop or maintain low body fat levels, never mix a meal replacement with milk or juice. Use water and ice. To flavor the drink, use extracts or a small amount of fresh fruit. On the other hand, if your goal is to gain weight, then mix the meal replacements with 2 cups skim milk and have an unlimited amount of starch at each meal. Some brand names to choose from are MetRx, Myoplex, and Lean Body. Women should use the Lean Body for Her or the Myo-Plex Lite.

Snacks

Snacking is part of normal eating patterns, but snack wisely. Select foods that have less fat and/or calories. Choose fat free ice cream over regular, or pretzels over chips. And always keep in mind that the goal is progress, not perfection. So, if you eat too many snack foods and don't like the way your body is shaping up, then cut back a little. Likewise, if you are constantly hungry between meals, than maybe you need to be eating a mini-meal as opposed to a snack. Either way, let's make sure you can develop a program that you can do for life! I like to call snacking nutritious nibbling. Because that's what it should be--nutritious foods that offset hunger until your next meal. Here are some ideas that are not found in the cookbook. There's a lot out there, and if you eat correctly, you really shouldn't need to snack that much. But if you must snack, the following are a few ideas:

- *Fresh fruit*
- *Dill pickles*
- *Air popped popcorn sprayed lightly with butter flavored cooking spray and seasoned with spices*
- *Try a Cajun seasoning and/or fat free Parmesan cheese*
- *Low fat or fat free cottage cheese with fresh fruit.*
- *Pretzels*
- *Rice cakes*
- *Try as a spread: Low sugar or all fruit preserves*
- *Mix fat free cream cheese with the low sugar jam*
- *Melt fat free cheese over the rice cake*
- *Nutra-sweetened pudding and Jell-O*
- *Try a heaping tablespoon of fat free Cool Whip over the Jell-O*

- *Vegetables with fat free dressing as a dip*
- *Fat free ranch, peppercorn, and fat free blue cheese dressings*
- *Place fat free cream cheese on celery sticks.*
- *Low calorie popsicles (they now make low calorie fudgesicles)*
- *Try Crystal Light Bars and various flavored icicle and fruit bars.*
- *Chocolate Mousse. Make a batch of Nutra-sweetened chocolate pudding (or any flavor will do the trick). After it sets, stir in one small carton of fat free Cool Whip. Place the mix in tall wine glasses and serve.*
- *Turkey Jerky. If you own your own food dehydrator, you can marinade fresh, boneless turkey breast in lite soy sauce and lite Teriyaki sauce. Slice the turkey breast into thin strips. Place on a food dehydrator and sprinkle with black pepper and cracked red pepper (follow the directions in the manual for operation directions).*



Exercise

When we were kids, exercise wasn't called exercise. It was called playing. It's sad that something that we enjoyed so much as kids, turned out to be something we dread as adults. I guess that's what therapists mean when they refer to someone "losing their inner child." I'm also amazed by how many adults will take the time to walk their dog, yet, won't even consider doing it for themselves. Well, the good news is

that exercise can be fun again if we learn to engage in an activity that we enjoy. The point is that as we get older, we get less active. Exercise is nothing more than increasing your activity.

I could spend a lot of time talking about how exercise will reduce your weight and risk for heart disease and diabetes, but I'm sure you are already familiar with all the typical discussions. Instead let's talk about a study that was conducted a few years back that looked at the benefits of weight resistance exercise. In a very well controlled study, a group of researchers went into a retirement home and selected a group of elderly people to participate in their study. Most of the subjects were over 70 years of age. Some even needed walkers and canes to stabilize them as they walked. The researchers took tissue samples and conducted some strength studies before starting. They videotaped each participant. One that really stands out in my mind was a gentleman that walked with a very unsteady gait. He shuffled rather than walked. They placed these subjects on an 8-10 week light weight training program. After the study ended, they took tissue samples again and video taped them. To everyone's amazement, they saw marked improvement in all of the subjects' mobility and stability. The old man that shuffled his feet, now walked with a much better stride. One participant that required a walker could walk for brief periods without the walker. All the before and after tissue samples showed the same result: the muscle cells after the training program were fuller and appeared to match cells of much younger people. The conclusion was that the unstable gait we develop with age is not a natural result of the aging process, but rather, is due to the lack of weight bearing exercise. As we age and become less active, the stabilizing muscles that allow us to stand firmly in place, along with the major muscle groups, waste away due to inactivity.

If you have just been diagnosed with diabetes, take note. Nothing, and I repeat, NOTHING, is more beneficial than a brisk walking or aerobic exercise program. The exercise will burn off excessive blood sugar and help keep your blood sugar under control. It's a fact that if you have adult onset diabetes, and it is in the early stages, by altering your eating program and with the addition of regular exercise, you can reverse the diabetic state. Diabetes is such an insidious disease and a road you don't want to go down. Strokes, heart attacks, loss of eyesight and limbs are very common problems associated with diabetes. If you would just take the time to exercise 30 minutes a day, your life could be saved and your quality of life will be vastly improved.

Now, I already know what many of you are saying, "but I don't have time to exercise." The fact is that you have just as much time in your day as everyone else. You just choose to have that negative tape in your head playing that same statement over and over again. And every time the idea of exercising comes up, on clicks the play switch and you blurt it out faster than the Enterprise in warp drive. Don't misunderstand me here. I am empathetic to your stress level; but I want to give you a few pointers on how to find the time to exercise. The first thing you need to understand is exactly how little time you need to find. Do you realize that four hours of exercise a week is enough time to accomplish just about everything you want? If you have more time than that great, but if you feel

stressed about your time constraints, four is enough. Here are a few tips to help you find that lost time you've been looking for. The big one is to watch less television. Just ignore the news, its negative hype anyway. In the same amount of time that the 30 minute news broadcast is over, you could have put on your tennis shoes and gone out for a quick walk or light jog. If you were to do that 4-5 times a week, you would have accumulated 2 to 2 1/2 hours per week of exercise. Consider how much time Americans waste watching T.V.--about 20 hours a week. It's rather amazing how much free time a person can find, if they unplug the darn thing. Watching T.V. accomplishes nothing. Imagine if someone could take a picture of you while you sat in front of the T.V. What would you see? You should see a person sitting mindlessly in front of a box staring at it for hours. It's surprising how many clients I see that complain about not having any free time. Yet in 99% of the cases, when I ask them how much T.V. they watch, they all say they don't watch it at all. Frankly, I think most of them are kidding themselves. I'll bet if they unplugged their T.V. they would go bonkers during their "at home time" because they have nothing to do. It's not that I think these people are deliberately lying; but rather I think they don't realize how much time they do watch T.V.

The same thing goes for reading the newspaper or mindless magazines like People or tabloids. I stopped getting the newspaper because I found myself running out of time in a day to read it. I literally spent thirty minutes reading the paper. One day, I had a few extra minutes so I sat down with the paper and a cup of coffee. The next thing I knew, I looked up and 40 minutes had passed. It's not that you can never watch T.V. or read; but, my point is that a lot of people waste too much time on these activities. Be selective about what you watch and read. I spend about 1 hour a day in my car driving to and from work. That's equal to about 30 hours a month. I listen to motivational tapes and books on tape while I'm in my car. I use my car as my learning center and it increases my productivity.

Another way to find extra time is to write down the time of day you plan on training. Some people do better to make the exercise a part of their workday. So, they go train during lunch. Others do better if they wake up an hour earlier and go to the gym. It's nice to have your day start off with a healthy activity and once it's done, your day is free to finish all the other obligations you need to do. I prefer to work out right after work. I make it part of my workday. The reason this works so well for me is because the gym is right near my work. If I go straight to the gym, I miss rush hour traffic and get home at 7 PM. If I try to go home first, I get home at 6:30. You see, it's a very efficient use of my time. Although my workout takes an hour, I save thirty minutes by going to the gym first.

How much excessive time do you spend chatting on the phone? Some people spend way too much time just sitting, talking about mindless chatter. Could you reduce that time and spend it taking better care of you? Have you ever noticed that you always have time for the things that are important to you? If you have a treadmill or stationary bike, you could talk on the phone while you exercise! The fact is that there is extra time in most people's day or week if they'd just reorganize and reprioritize things.

If you are already working out, great! Keep it up! My intention here is to initiate an exercise program and show you how to get started. So, choose one of the following programs that you think you would enjoy doing.

Beginning Cardio

Step one, begin a brisk walking program. Start off slowly and build up over time. Try walking for thirty minutes. If that's too much, start where you can and your goal should be to build up to 30 minutes five days a week. As time goes on, increase the speed. After you have been on a brisk walking program for six to eight weeks, begin to break the brisk walk into a slow jog. Alternate back and forth between a walk and jog. Continue to do this until you can do the light jog for 20-30 minutes, 4-5 times a week. If you don't want to walk/jog, feel free to use a treadmill, Stairmaster, rollerblade, play soccer, or any type of aerobic activity that you enjoy.

Beginning Weight Training

If you join a local gym and it is your first time, begin a circuit weight training program. All gyms offer some kind of circuit training. This light resistance workout will allow your joints, tendons and ligaments to get acclimated to the weight bearing exercises. Do the circuit training three times a week and after you finish the circuit training, follow

it with 20-30 minutes of cardio. The total time to finish this workout will take about 45 minutes to 1 hour. On your days off from the gym, engage in some type of aerobic activity for about 30 minutes (see above example). After you have been doing the circuit training program for about three months, move into the three day split weight training program on the next page.

3 Day Week Split Weight Training Program

Day One: Chest/Triceps

(Example Monday)

Chest: 10 sets, 10 - 12 reps

- 4 sets Bench Press
- 4 sets Incline Bench Press
- 2 sets Dumbbell Flies

Triceps: 9 sets, 10 - 12 reps

- 3 sets Triceps Pushdown
- 3 sets French press
- 3 sets Kickbacks

Note: Do 20-30 minutes of cardio after weight training.

Day Two: Shoulders/Legs

(Example Wednesday)

Shoulders: 6 sets, 10 - 12 reps

- 2 sets Side Lateral Raises
- 2 sets Front Raises
- 2 sets Rear Deltoid Raises

Calves: 6 sets, 15-20 reps

- 3 sets Seated Calf Raises
- 3 sets Standing Calf Raises

Quads: 8 sets, 10-12 reps

- 3 sets Squats
- 3 sets Leg Press
- 2 sets Leg Extensions

Hamstrings: 4 sets, 12 reps

- 4 sets Hamstring Curl

Note: Don't do cardio on this day.

Day Three: Back/Biceps

(Example Fridays)

Back: 10 sets, 10-12 reps

- 4 sets Wide Grip Lat Pull down
- 4 sets Close Grip Cable Row
- 2 sets Bent Over Row

Biceps: 9 sets, 10-12 reps

- 3 sets Biceps Curl
- 3 sets Preachers Curl
- 3 sets Concentration Curl

Note: Do 20-30 minutes of cardio after weight training. On Tuesdays and Thursdays, do 45 minutes of cardio.

Key Points

- Do cardio after weight training, not before.
- Warm up before starting.
- Warm up. Then train as heavy as possible for the allotted number of repetitions.
- Change the exercises often, but keep the number of reps and sets the same.
- Vary the tempo or speed at which you do your repetitions.

Note: Remember that the downward portion of the movement is 50% of the movement. So keep control over the weight on the upward and downward portion of each movement.

Overtraining or Undereating?

Whenever I open many of today's popular bodybuilding magazines, there always seems to be some story about how everyone should cut back on weight training in order to avoid "over-training." The problem is that the source of over-training can be difficult to pinpoint because there are so many variables that can cause it. These variables include: genetics (i.e. muscle fiber ratios and recuperative abilities), training (mode, frequency, intensity and duration of the activity) and dietary habits. Most articles focus on the amount of sets and number of repetitions that contribute to an over-trained state. While those aspects are important, I would like you to consider an additional viewpoint:

Most over-trained states stem from an inadequate diet. Without adequate nutritional support, your muscles cannot grow! Imagine a long distance runner eating one meal a day. How long would he last, and how far do you think he could go? Do you think he could reach peak performance eating one, two, or even three meals a day? Many bodybuilders focus their attention on the importance of not over-training with weights and at the same time completely ignore the nutrient profiles of their diet. So, how could your diet be the root cause of over-training?

Protein Intake

The first way that your diet could contribute to over-training is an inadequate protein intake. Protein is a key component to retaining muscle and providing adequate amino acids back into the amino acid pool within your body. In order to induce muscle to respond and grow, you must first stress it maximally with weight resistance; and then amino acids must be present to aid in the tissue repair. If your diet is lacking in protein, you can basically train as hard and as intensely as you want and you still won't see any growth.

One of the criteria that people use to gauge whether or not they have over-trained is their ability to recuperate. If protein intake is inadequate and recuperation is affected, it's easy to see how some people could mistakenly think that it is the weight training and not their diet that is the root cause. Protein is one of the most anti-catabolic agents you can ingest, and I am a big believer in spreading the protein intake out over five or six meals. The protein must be a low fat and from a high quality source like chicken or turkey breast, egg whites, or fish. Bodybuilders who ingest the right amount of protein for their bodyweight, but do it over the course of three meals, invariably hit plateaus with their lean body mass gains. I've personally witnessed and documented the dramatic changes in bodybuilders' physiques when they've increased their meal frequency from four balanced meals to six.

As mentioned in the section on protein, the RDA for protein was based on inactive people, not athletes in heavy training. Dr. Antonio, a muscle cell biologist, feels that bodybuilders need approximately double the RDA of their calories from protein. I'll take that one step further and say that it should be evenly spread out over all six meals.

Water Intake

I'm sure that you are aware of the importance of drinking a lot of water. But do you realize that there is a direct correlation between drinking too little water and the likelihood of becoming "over-trained?" Adequate water intake is critical, especially for athletes, for various reasons. Not only is muscle comprised of over 70% water; but a diet higher in protein requires more water. Further, sweating from intense workouts causes a loss of body water. Also, water serves an important role in cellular activity which is an essential transport mechanism for a vast array of nutrients like vitamins, minerals, and carbohydrates. If your water intake is too low, your ability to transport nutrients becomes compromised, muscle fullness decreases, and a toxic build-up of ammonia, urea, uric acid and even nitrogen begins to accumulate in your body. As the entire row of dominoes begins to fall, your body then becomes unable to push water into the muscle because too much water is being pulled out to handle the demands and stresses being placed on the body.

A simple way to check to see if you are adequately hydrated is to take your bodyweight and multiply it by .55. The resulting number is about how many ounces of water you should drink every day. For example, I currently weigh

202 pounds; therefore, I should drink about $202 \times .55 = 111$ ounces of water per day. If you are a long distance runner or exercise in extreme heat, multiply your bodyweight by .66.

Complex Carbohydrates

Carbohydrates provide a protein sparing effect. Under normal circumstances, protein serves a vital role in the maintenance, repair, and growth of body tissues. If your body doesn't have enough carbohydrates it has to metabolize more protein. When carbohydrate reserves are reduced, the body will convert protein into glucose for energy. This process is called gluconeogenesis. The price that is paid is a reduction in the body's protein stores - in other words, muscle!

One common complaint from people that feel over-trained is that they have less energy and notice a loss of muscle fullness. If your carbohydrate intake is too low, your muscles may feel flat and your energy will be low. Muscle fullness depends, to a large extent, on glycogen stores.

Also, note that for every gram of carbohydrate you ingest, your body will carry about 4-5 grams of water with it. Therefore, if you decrease your carbohydrate intake, you naturally drop body water. Although this may sound like a good idea, when you resume eating carbohydrates, you may find that your body rebounds and retains excess water. This can wreak havoc on a dieter's mental state.

Your carbohydrate intake can vary depending on your goal; but, try to get at least 55% complex carbohydrates during the mass building season. As your contest nears, decrease your carbohydrate intake.

Caloric Intake

When dieting, you walk a very fine line between losing body fat and losing muscle. In your attempt to drop body fat, it is necessary to ingest fewer calories. However, if you ingest too few calories, you may be giving up precious nutrients that your muscles need. Your energy and endurance will also be affected by the lack of calories. You will not have the energy to get through the workout, and your strength will suffer. To top it off, if you do more cardio while restricting your calories, you are more likely to notice a loss of lean body mass. Once again, it is easy to misinterpret the loss of energy and strength to over-training.

Meal Frequency

In the previous section, we talked about the benefits of meal frequency. But just how does eating more often prevent over-training? For optimal performance, bodybuilders and athletes require six small, balanced meals throughout the day. If you currently eat four meals a day, all spread evenly apart, each balanced with a little protein and complex carbohydrates, you probably have already noticed the importance of meal frequency. Now, consider the exponential benefits that eating two more meals a day would have on increasing your energy level and on increasing your ability to recuperate from intense workouts. Also, think of the additional protein and nutrients that you would gain which would facilitate further muscle growth. Don't make the mistake of thinking that you can cram more and more food into each meal and get good results. This will only lead to overloading your digestive system, and the excess food would be converted into fat.

Meal Balance

Each meal must, and I repeat MUST, contain a balance of protein and complex carbohydrates in order for you to really get the most out of your weight training. Too many people don't understand the important role this combination of food plays in gaining mass and dropping body fat. The only exception is the last meal at night. It's okay to simply eat protein and veggies before going to bed.

Inconsistent Sleeping Patterns

Your diet may be sufficient to allow for adequate recuperation under normal circumstances; but, if there is added stress stemming from insufficient sleep, you are more likely to become over-trained. Try to get eight hours of uninterrupted sleep each night. Without adequate rest, the body, over time, cannot sufficiently recover. Coupled with an inadequate diet, you may find yourself feeling tired, losing strength, and lacking the desire to work out.

Also, changing your sleep patterns can disrupt your eating schedule and your ability to fit all six meals into your schedule. If you stay up too late one night and sleep late the next day, you'll be less likely to have the time to fit in six meals during your day.

Ergogenic Aids

It's interesting how many articles cite unsubstantiated research suggesting that Americans are deficient in chromium or selenium. This kind of advertising definitely sells supplements. Additional vitamins and minerals, if used sensibly, can indeed help your recovery. However, if you are taking 30 pills a day, you need to re-think your vitamin strategy. Many people buy too many supplements. No matter what you take, if your diet isn't right, the supplements are not going to help you gain muscle. I'm constantly amazed at how eager athletes are to add and try new supplements without first getting their dietary program in order. Most people can definitely benefit from a well rounded multi-vitamin and an additional multi-mineral. Minerals are important because most people trying to lean down avoid dairy products. Extra vitamin C and E can also be good additions to your program since they act as strong anti-oxidants which can aid in recuperation. Creatine monohydrate seems to work very well at keeping your muscles hydrated and providing more endurance. Start with these and after three or four months, assess your progress before adding additional supplements.

Most people could train harder, more often, and more effectively, if they understood the role their diet plays in preventing over-training. Advocates of training less should focus more on a person's diet to make sure that the lack of growth isn't stemming from an improper diet. I think that great physiques are built because dietary principles are in line with training protocol. The reality is that there is no magic training program or vitamin pill that will make you grow. It is the totality of what you do on a consistent basis that will eventually get you where you want to be.



Body Image

The “Kleinstein” Theory of Time Relativity

Some people will never be satisfied with their body no matter how great they look to other people. Body image is a very complex subject because each person’s perception is their reality. So no matter how often you hear how great you look, if you don’t think so, that’s your reality. So I thought it might be interesting to share a thought that I had one day concerning body image. In order to make sense of it all, bear with me because I need to start with a story about time.

Have you ever noticed that time seems to be going by faster as you get older? I remember when I was young, my mom and dad used to comment on how fast time seemed to be slipping by. In fact, my grandparents often said, “Wait until you get to be our age. Time will fly by faster than a hummingbird on amphetamines.” Well, sure enough, they were right. The older I get, the faster time seems to move. Have you ever wondered why?

If you were five years old and I told you, “I bought this pair of shoes twenty years ago,” that would seem incomprehensible. The reason: twenty years is four times longer than you’ve been in existence. If I told you the same thing when you are twenty, it would still seem like a very long time because it would span your entire lifetime. However, if I proposed the same statement to you at age 40, twenty years wouldn’t seem that long ago. After all, it was about then you probably graduated from college and you can still readily recall all the things that occurred during that time. You have been alive twice as long and therefore, it wouldn’t seem that long ago. Now, when you reach eighty, those twenty year old shoes would be nothing because you’ve been in existence four times longer. In fact, that pair of shoes might even seem brand new and hardly even broken in.

As you can see, time is relative to your own experience. The longer you’ve been alive, the more experience acquired and the faster it seems to go by. This explains why time seems to get distorted as we age. Now, before you start to ask yourself just what on earth I’ve been smoking and what relevance does this have to nutrition, fitness or exercise, consider this thought:

Imagine being disgusted with your weight. You look in the mirror and vow to start a diet and exercise program. You have your body fat measured and it turns out to be a very depressing 30%. So, you hire a personal trainer to exercise your tail off and within a month your body fat drops from 30% to 25%. Your belt fits more loosely or you dropped a dress size and when you look in the mirror you begin to like what you see. So, you forge ahead. Just after a few more weeks, your body fat drops from 25% to 20%. Now, you really feel good about yourself. Family, friends and even people you don’t even know start to comment on how good you look. Inside you’re beaming with confidence. After a few more months, you drop even more body fat and when you get tested, your body fat measures a remarkable 15%. Suddenly, the urge to wear really short shorts overwhelms you. You begin to realize that you look pretty darn good in that tank top. Going to the beach, surprisingly enough, in a skimpy bathing suit sounds like a wonderful idea.

As you begin to enjoy your new look, you begin to rationalize backing-off the training a bit. You spend more time dating and eating out. So, when your body fat tests higher at 18%, you panic. You feel as fat as you did when you were at 30%. You not only feel fat, you feel like a slob, instead of feeling good about being at 18%. Have you ever wondered why when you were at 20% you felt great but now at 18% you feel fat, ugly and overweight? The reason: How lean you feel is all relative to how lean you have been in the past. Once you have been really lean, you can never feel that lean again, unless you achieve that same level of leanness. Consequently, your body

image can be distorted because of your past experiences with being lean.

Have you ever met a person that has an absolutely gorgeous “bod”, and yet, they seem totally dissatisfied by the way they look? How about, the person who always comments that they need to be 120 pounds? The last time they remember being 120 pounds was ten years ago. Or, how about the 32 year old insisting that she has to achieve the same body weight that she had when she was in high school.

Is it possible that people can look great, and yet feel not so great about themselves? Of course it is. I've seen anorexics that look in the mirror and see a fat person, bodybuilders that see a thin person, and beautiful models that see an ugly person. There are even some people who are discontented with their bodies even though they look great. For them, enough is never enough. They spend so much energy worrying about how they look to other people that they never seem to enjoy life. As long as they continue to compare themselves to unrealistic standards or to other people, they can never be truly happy. Just look around the gym and notice how many great looking women wrap their sweat shirts around their waist to cover their hips. I'm assuming they do that because they feel self-conscious about their body around other people. The fact of the matter is, there will always be someone thinner, better looking, richer, and smarter.

Do you really think anyone else notices when you put on an additional pound or two? Does it really matter? Is it possible that by comparing yourself to others you end up feeding your own chronic dissatisfaction? Just keep this in mind: What we all want when we compare ourselves to others is a connection with those around us. But what it does in the long run is create a feeling of separateness. In other words, you can't get a sense of belonging when you focus on differences.



Supplements

You may recall headlines referring to a compound that researchers discovered called the ob/gene, which stands for obese gene. This discovery led to Amgen's development of an obesity drug called Leptin.

Leptin is an injectable hormone discovered by Jeffery Friedman, a molecular geneticist at the Howard Hughes Medical Institute. His research team discovered a mutant obesity gene in mice. They suspected that this gene caused them to pile on extra body fat.

Then the discovery came that fat cells secreted this hormone into the blood stream. As the number of fat cells increase, the level of this hormone rises. The hormone level appears to be regulated by a feedback mechanism (a gene) and once enough fat has been stored, the level of this hormone diminishes. However, in the case of obese mice, the gene that regulates this process is defective and is unable to produce this hormone in sufficient quantities. Consequently, the mice with the defective gene continued to get fatter and fatter because the body could not receive the message that enough fat had been stored.

Daily injections of Leptin are used to signal the body that too much fat has accumulated, and the body will then begin to decrease fat reserves. When researchers injected human Leptin into the stomachs of 10 obese mice, they lost an average of 30% of their body weight after two weeks. After 33 days, the mice lost an average of 40% of their body weight. The control group which was injected with saline lost no weight. Not only did the Leptin treated obese mice trim down; but their body temperature rose, their appetite fell, and they became much more active.

Now for the really exciting news: A soon to be released supplement has been extensively researched and studied by a muscle cell biologist, Dr. Joe Antonio, at the Southwest Texas Medical School Biology Department. The breakthrough occurred by accident when Dr. Antonio was conducting a routine experiment with a food compound that he had found in egg yolks. Apparently, this compound, alpha hydroxyglutarate (AHG), is responsible for the accelerated growth rate of chickens.

While conducting a study involving rats, Dr. Antonio misread the protocol and mistakenly placed the AHG through a forced feeding tube into the rats' small intestines instead of the rats' stomachs. His simple mistake led to the greatest obesity discovery within the last sixty years. Evidently, bypassing the stomach and placing the compound directly into the small intestine resulted in the AHG being directly absorbed into the bloodstream unaltered.

Within a few short days of administering AHG, Dr. Antonio noticed that all the rats in the study had dropped significant amounts of body fat. All the rats became very thin, became much more active, and seemed to require less sleep.

Upon further investigation, Dr. Antonio discovered that the body temperature of every rat had increased by a constant 2 degrees. Apparently, the AHG was responsible for increasing the body temperature of the rats. The increase in temperature substantially increased their metabolic rate and resulted in a massive loss of body fat. Most importantly, this all occurred without adding exercise or restricting their food intake!

Now, here's where the study gets really interesting: Because this compound was isolated from a food (egg yolks) it did not require, like most new drugs, the financial and rigorous burden of animal testing. Also, since it was considered a food compound, it fell under the jurisdiction of the Supplement Act as opposed to the FDA's Drug Act. This means that testing on humans could begin without delay.

Dr. Antonio quickly established human studies at various independent clinics across Texas. I received a call from him late last year and took part in conducting a double-blind study on several obese subjects in the Houston area. Currently, there are three separate AHG clinical studies being completed and the results will be released at the next American College of Sports Medicine Conference. Every subject chosen for these studies weighed in excess of 275 pounds. 50% of the subjects were female, and the other half were males. All of the subjects were under the age of 50, and none were allowed to exercise or change their dietary habits. The AHG was administered in enteric coated tablets, so that the compound could enter the small intestine unaltered. The results: Every subject that received the AHG dropped an average of three pounds of fat each week during the entire three-month study. The placebo group gained an average of .75 pounds during the study!

By the time you read this report, the studies will have already been presented. I just wanted to be the first to tell you about it. Remember, since this is a food compound and is not considered a drug by conventional standards, it should be made available to the public within a few months.

Now, here's the most amazing part of the entire study: It doesn't exist! I made up the entire story! You may be wondering why on earth I would waste the last five minutes of your life telling you a complete lie. Well, I wanted to illustrate how easy it is for someone to use catch words, phrases and medical jargon to create a desire for a supplement that is virtually useless.

You see, I used a catchy title, neat buzzwords like "breakthrough," "incredible," "amazing," "discovery," and "double blind study," and added a few other details (like a doctor's name) to draw your attention to my bogus product. Did it sound convincing? If so, read on. I want to tell you about something that's happening to you every day you turn on the news or listen to your radio.

There seems to be a current trend within the news media to read medical journals, then extrapolate small sections of the information from the study and present it to the world without telling the complete story. Consumers see the latest news breaking stories about how a supplement does this or a vitamin pill does that and they may actually make dietary changes that could be potentially harmful. Too many people are willing to accept an occasional piece of research as fact because the study was conducted by a "University" or "Doctor." Regardless, you and I may never really know who is behind the study and if we don't actually read the study cited, we can't look at it objectively for methodology flaws. I thought you might like to see a couple of examples of actual studies that have graced the headlines:

Caffeine Reduces Your Risk of Suicide by 66%

Researchers at Harvard reported that drinking 2-3 cups of coffee per day will greatly reduce your risk of committing suicide. Of all the stupid headlines that I've seen lately, this one takes the cake. Caffeine is a very strong drug. In fact, if you suffer from a heart arrhythmia, caffeine can be deadly. This report, like many others, forgot to mention the risks. For example, women suffering from fibrocystic breast disease will experience more pain and cyst growth from consuming caffeine. Also, the report failed to give concrete data to support the notion that caffeine could curb suicide. Coffee may improve your mood and sense of well-being, but to make the leap in logic that coffee can prevent suicide is a tall tale indeed. I wonder which coffee company paid Harvard to conduct such a senseless study.

Oat Bran Can Reduce Your Cholesterol Level

It was billed as a dietary cure-all during the late 1980's and everybody jumped on the oat bran bandwagon. Cookies, muffins, waffles, cereals, and even pretzels had "made with oat bran" across their labels. Within a few months after the media hailed oat bran as the latest cure for elevated cholesterol, the supermarket shelves were covered with Kellogg's "Cracklin' Oat Bran," "Post Oat Flakes," "Common Sense Oat Bran" and at least a dozen other new cereals. By 1989, sales of oat bran cereals rose to a staggering \$247 million, up by 240% from the previous year. Then the books came.... The Eight-Week Cholesterol Cure claimed that eating three oat bran muffins a day, in combination with a low fat diet and some niacin, would save your life. What you didn't hear was that many

fibers reduce cholesterol levels, not just oat bran. Fiber has the ability to absorb cholesterol within the intestinal tract and carry it out of your system unabsorbed. The problem wasn't the fiber. The problem was that many of the products that advertised "contains oat bran" didn't contain significant amounts of oat bran. In fact, many ingredient listings contained mainly white flour with oat bran being listed near the bottom of the ingredients. Imagine eating three Otis Spunkmeyer oat bran muffins a day to reduce your risk of heart disease and finding out later that each muffin contained 364 calories and 13.5 g of fat. That's a whopping 33% fat! Also, what does the 737 mg. of sodium contained in each muffin do to your blood pressure?

Alcohol Increases Your Metabolic Rate

This study appeared in the American Journal of Physiology and reported that the ingestion of alcohol can significantly increase the metabolic rate in nonalcoholic, young, healthy, nonsmoking males. Two studies showed similar results. In the first study, the volunteers were given 96g of alcohol spaced out over 3 meals and accounted for 25% of their total caloric requirements. The second study examined the thermic effect of alcohol during a fasting state. Indirect calorimetry measurements were made over a 24-hour period in a respirator chamber for the first study and during a 5-hour period using a ventilator hood during the second study.

The first study proved that alcohol led to an increased energy expenditure that corresponded to a thermogenic response of 22%, and the second study proved that the ingestion of alcohol during a fasting state leads to a thermogenic response of 17% of the ingested calories from alcohol. In other words, for every 100 calories of alcohol you drink, your body will have to burn 17-22 of those calories off just to do the work of digesting the alcohol.

Perhaps the most important message of all is what wasn't said from the study. Besides the fact that alcohol interacts with drugs, is addictive, ruins your liver, decreases your willpower, and increases your appetite (just to name a few), it also alters a few metabolic processes. For example, alcohol intake decreases lipid oxidation, so despite its thermogenic effect, alcohol is likely to increase lipid storage by inhibiting lipid oxidation.

So there you have it! New research shows that alcohol increases your metabolic rate, but it doesn't bother to state that it increases fat storage! Sounds like a good study for the alcohol industry to use on 60 Minutes next month.

Chromium Picolinate Decreases Body Fat Decreases Appetite and Increases Muscle Mass

The chromium picolinate concentration in the human body is very small. Supplement companies are actively advising consumers to increase their intake of chromium picolinate with blatant disregard to whether they are deficient or not.

Chromium, like every other vitamin and mineral, has an important role/function and is part of the human body's delicate balance. As with most vitamins and minerals, taking more than you need to will not enhance the function it performs. The human body may store the extra nutrient until it becomes toxic; or flush it through your system. With chromium, both things happen, some gets stored and some is excreted.

According to findings reported by Hank Lukaski, a researcher at the U.S. Department of Agriculture Human Nutrition Research Center, chromium picolinate has no effect on building muscle, reducing body fat or increasing strength. In the study conducted, 35 healthy men participated in a rigorous strength training program. The men were divided into three different groups. During the eight week training program, one group was given chromium picolinate, another group was given chromium chloride, and the final group was given a placebo. No differences could be found between the three groups in strength, body weight or body composition. Another study conducted by the International Journal of Sport Nutrition, found similar results. In a nine week study of 38 football players, there was no change recorded. However, the subjects secreted five times as much chromium in their urine than the placebo group.

It is important to note that the toxicity level of chromium has not been clearly established, and taking large doses may have negative side effects. Chromium plays a role in the carbohydrate metabolism and is necessary for the

binding of insulin to the cell membrane. When too much is taken, this function may reverse and inhibit, rather than enhance insulin activity. The outrageous claims made in chromium picolinate ads are unfounded and the research cited has numerous methodology problems.

The list is endless. Yeah, I know. Household electricity is supposed to cause cancer. Chromium picolinate reduces body fat, hunger and is supposed to increase muscle mass. Rare red meat reduces your risk of getting cancer. Arginine and ornithine releases growth hormone. And when the grass turns green there will be potato chips in the park.

The fact is that science isn't always an exact science. The same data can look completely different to different researchers. Consequently, opposite conclusions and opinions can be drawn from the same data. Also, the search for the truth is almost always smothered by a hungry public that wants quick answers, journalists that want a new exciting story, universities that want grant money, and last but not least, owners of companies that want to increase profits. So, before you rush out to try the latest craze that the media blitz creates, consider the following pointers:

- *Just because something happens in a test tube or in a rat doesn't mean it will happen in a human being.*
- *A valid experiment must be "blinded" which means the participants don't know whether they are in the control or placebo group.*
- *Epidemiological studies usually cannot prove a cause and effect. They can identify associations and risk factors; further, there are numerous variables that can lead to a false conclusion.*
- *Be leery of percentages. Any good scientist can make numbers look better by using percentages. For example, if the control group gained one half a pound of lean body mass and the group receiving a supplement gained one pound of lean body mass, we could say the subjects that used the supplement gained 100% more lean body mass than the control group. Obviously, 100% more muscle sounds better than one half pound more muscle. Similarly, when a study uses the statement "doubles the risk of," it may not mean a whole lot. For example, if the risk for getting cancer is one in a billion and the compound doubles the risk, the chances are now one in half a billion.*
- *Researchers can draw the wrong conclusion from information. For example, bodybuilders eat eggs. Eggs are baby chickens. Therefore, bodybuilders eat babies.*
- *Research is a vast accumulation of information that takes years to collect and draw conclusions from. In many instances, the companies that benefit from a study suggest a correlation too soon.*
- *"May" doesn't always mean "will."*
- *A lot of research is hyped-up by the media and food manufacturers. Don't become cynical, but don't believe everything you read either. In other words, don't become reactionary to one reported study.*
- *Hidden variables may often hide the actual facts. For example, research states that beta-carotene may reduce your risk of developing certain types of cancer. Yet, people that eat a diet high in beta-carotene (lots of vegetables) may also do other things that promote good health. They may exercise more, eat out less, drink less alcohol, or may not smoke.*
- *Sometimes the study can be flawed. The uninformed person reading the results may overlook various methodology problems.*
- *Always look for the number of participants that took part in a study. The results could be meaningless if the study was small or of a short duration.*
- *Many universities and scientists send out press releases to generate interest and gain extra publicity. The press release is intended to grab your attention and be newsworthy, so take what you hear with a grain of salt.*
- *For every piece of research that you show me that states a conclusion, I can find another piece that states just the opposite. Therefore, research is equivalent. The goal of the scientific community is to develop the most research that supports their opinion. If people can accumulate enough data to support their opinion, they will tilt the balance in their favor. And if that person or university possesses the most research that supports an opinion they are the clear winners.*

I think the news media is bombarding us with a lot of unnecessary and confusing information from scientific journals, and it's only a matter of time before the American public becomes so confused by the conflicting information that they just stop listening completely. If you don't believe everything you hear or read about politics, business or court cases, why should you believe everything you hear about the latest "breakthrough?"

One more thing, if you are still interested in buying some AHG, give me a call. But wait - that's not all! If you order before midnight tonight, you'll also receive a free liposuction kit. It sucks; no, it really sucks. If your carpet looks better after you vacuum it, why wouldn't your thighs. Best of all, it's free! That's right - absolutely free! Just send \$499.99 plus shipping and handling to....



At Least He Wasn't Driving!

No animals were harmed during this photo shoot... just hung over.

Alcohol & Red Whine

I don't think anyone has ever sat down with a glass of wine, turned to the person next to them and proclaimed, "I hope I'm a raging alcoholic in 10 years!" But every addiction begins with a first experience. Do you recall the media blitz concerning alcohol? The press sensationalized

a small study that found a possible connection between wine and a reduced risk for heart disease. After watching all of the hype, I thought it would be a good idea to set the record straight and attempt to offer an opposing viewpoint.

I found it very odd that the media spent so much time discussing the benefits of drinking wine without ever mentioning any negative aspects of drinking wine. They didn't bother to mention the potential drug interactions that occur with alcohol. Imagine a heart patient hearing the news reports and deciding to follow the advice of drinking two glasses of wine a day. First, let's hope they consider their medication before they start. Several medications interact with alcohol, including heart medications. Drugs like Valium, Halcyon, antidepressants, thyroid medications and a host of other drugs can interact with alcohol, causing potentially lethal combinations. The media blitz also failed to cover the addictive properties of alcohol. The news report's suggestion that drinking just two glasses of wine a day will decrease a person's risk for heart disease would be a simple answer; but doing so may cause other complicated side effects. Consider this, just two glasses of wine a day equals three bottles of wine a week; which equals twelve bottles of wine a month or 144 bottles of wine a year! Anyone drinking that amount of wine should seek immediate help from the local Alcoholics Anonymous chapter. In addition, you probably wouldn't want me driving next to you after drinking two glasses of wine. I'm a cheap drunk, so you can bet your car won't look the same as it did before I came swerving along. Researchers have found a direct correlation to hip fractures in the elderly and alcohol consumption. Apparently, after a mere two drinks, elderly people were three times more likely to fall over. Gee, I wonder how many of our tax dollars went to the rocket scientist that figured that one out?

Here's something else the news media forgot to mention. One of the risk factors for developing esophageal cancer is wine. Its acidic properties burn the throat lining causing tiny blood vessels to burst; if this cycle is repeated long enough then cancer may occur. Alcohol also raises triglyceride levels within the blood stream. These little fat packages are synthesized from the alcohol sugar. They are sticky and contribute to plaque formation and hardening of the arteries. Alcohol is also a depressant; therefore, it decreases your motivation. Have you ever missed a workout after a night of drinking? Last but not least, alcohol is an appetite inducer. After a night of drinking everyone suddenly gets the urge to stop at the local greasy spoon to eat. And take it from me, their choices aren't going to be grilled chicken breast and steamed potatoes.

I also find it a bit weird that the media never mentioned the interaction between alcohol and acetaminophen, the pain killer in Tylenol. It's a well-known fact that taking Tylenol before, during or after drinking alcohol makes a dangerous combination that can lead to severe liver damage.

Alcohol is the most widely abused social drug in the world. I use the word "drug" because of the way it is absorbed. Food is typically absorbed into the system via the small intestine and large intestine. Alcohol, on the other hand, is absorbed through the stomach wall just like many drugs. In fact, alcohol is absorbed so quickly that within minutes it reaches the brain. If you have ever slammed a shot of tequila, you'll notice it only takes about 90 seconds before you feel its effects. That illustrates how quickly alcohol reaches your brain.

There is no fat or protein within alcoholic beverages; but, it doesn't come without a calorie price tag. In fact, alcohol contains more calories per gram than proteins, or carbohydrates and nearly as many as fats. Alcohol contains a whopping 7 calories per gram, almost twice as many as all other sources of carbohydrates. Here's the real clincher about alcohol. Two cans of regular soda contain 19.5 teaspoons of sugar. In comparison, three glasses of wine contain the same caloric equivalent as 19.5 teaspoons of sugar. Okay, so maybe you don't drink wine. But that's also how much is within three light beers or three shots of 100 proof liquor.

Alcohol doesn't just cause a weight gain; it also has a negative effect on the liver, brain, cardiovascular system and the gastrointestinal tract as well. With all the down-sides associated with alcohol, I think the news media should have at least mentioned a few opposing viewpoints.

Okay, with all that negative stuff out of the way, how can you incorporate alcohol into a healthy dietary program? For starters, begin by making a Better Bad Choice™. Consider the positive effects of reducing the frequency that you drink. In other words, if you normally drink five times a week, think about drinking only on the weekends. The net effect of drinking two times a week as opposed to five will yield the health and appearance benefits you desire. Another way to incorporate the Better Bad Choice™ approach is to cut back on the amount you normally drink. By having one or two drinks instead of five or six, the net effect will be significant.

One problem many people face with alcohol is the social and peer pressure associated with drinking. Overcoming social pressure requires developing a refusal response that feels comfortable and that others can accept. It means saying "no" and meaning it. However, some people don't feel confident enough saying a direct "no" because of their fear of rejection. One terrific way to avoid the social pressure is to designate you as the driver for the evening. This action rarely leads to pressure from others and at the same time releases you from feeling compelled to drink.

Another refusal response is to tell others that you are currently taking a prescribed medication that requires no alcohol. Just tell your friends that your doctor has asked that you avoid alcohol for the next six months. If you feel a refusal response won't work, put something in your hand to give the illusion that you are drinking. Try holding a diet soda with a twist of lime at your next party. Everyone will see the drink and assume it contains alcohol. Or, try wine spritzers. Wine spritzers consist of one ounce of wine and three ounces of club soda. Every 4 wine spritzers that you drink will equal the calories of one glass of wine. Using this technique will allow you to still be social, appear to be drinking and thereby avoid social pressure.

Naturally, if you want to drink, it would be wise to select a beverage that contains the fewest calories. For example, consider a person that drinks two glasses of wine each evening. After one week, a total of fourteen hundred calories have been ingested. With that number of calories, about one pound of body fat will be added every two and a half weeks. And be aware that wine coolers can contain up to 240 calories per bottle. Wine coolers are made from fruit juices, carbonated water, wine and sugar. These are lower in alcohol than regular wine, but much higher in calories. Or instead of mixing a drink with regular soda or fruit juice, use a non-caloric beverage like diet soda or club soda.

The higher the alcohol content of the beverage, the more calories it contains. For instance, 1 1/2 ounces of 80 proof alcohol contains 97 calories while the same amount of 100 proof alcohol contains 125 calories. The reason for the higher caloric content stems from the fact that the alcohol is more concentrated; therefore, it contains more calories. So, it may make good sense to stock your cupboards with the lower proof to help others reduce calories and reduce their risk of becoming too drunk. Non-alcoholic beverages can contain as many or more calories than their alcoholic counterparts; so be careful.

Salty foods such as pretzels, peanuts, chips and crackers should be avoided because they increase your thirst. And of course, the thirstier you are, the more alcohol you'll drink. Eating a solid meal before you attend a party can also help slow down the entry rate of alcohol.

Successfully using alcohol requires planning. Know your limits. Decide ahead of time when, where and how much you are going to drink.

Decide how many times per month you will drink and stick to that goal.

So, what's the bottom line?

The bottom line: If you struggle with your weight and want to see the best results, omit alcohol and see what happens. And of course, if you really want to reduce your heart disease risk, try exercising and lowering your saturated fat intake.

By the way, it wasn't the wine that reduced the risk of heart disease after all; it was phyto-chemicals within the grapes that reduced the risk!



Does Aspartame Cause Brain Cancer?

A short while ago, the news reported a study regarding aspartame and its link to brain cancer. The news picked up on the press release. It went out through the national media channels then on to the local news coverage. About four weeks after that news blitz, I received a fax that apparently was being sent across the nation by a group that calls itself the Aspartame Consumer

Safety Group. Their fax was very disturbing because it cited so many falsehoods about aspartame and it sparked a nationwide debate about aspartame's safety. At the top of their fax it stated in big letters, "Warning! NutraSweet is a neurotoxin." The fax went on to say that aspartame was the Thalidomide of the 90's. Further, it linked aspartame to headaches, dizziness, seizures, nausea, numbness, muscle spasms, weight gain, rashes, depression, fatigue, irritability, tachycardia, insomnia, blindness, hearing loss, heart palpitations, breathing difficulty, anxiety attacks, slurred speech, blurred vision, and loss of taste, vertigo, memory loss, and joint pain. It also stated that aspartame was linked to brain tumors, chronic fatigue syndrome, mental retardation, multiple sclerosis, Parkinson's, lymphoma, diabetes, epilepsy, Alzheimer's, birth defects and even death. In addition, the paper went on to tell consumers that pilots were having seizures in the cockpits of jumbo jets from eating a single stick of chewing gum sweetened with aspartame.

This has to make you stop and think. If aspartame was responsible for all those illnesses and was approved for use in foods in the early 80's, what was the root cause of them before aspartame was used in foods? And whoever wrote the aspartame letters should have realized that they listed a few illnesses twice by different names. Tachycardia is heart palpitations, and vertigo is dizziness. So why list both? It just goes to show you that whoever wrote the information didn't have a medical background. In fact, I called the Aspartame Consumer Safety Network and did a radio show with Mary Stoddard, the President. While the Aspartame Consumer Safety Network may sound like a government body, Ms. Stoddard is a housewife that started the group because her child experienced problems with aspartame. I don't discount her child's negative experience; but I think her view of aspartame is affected by one bad experience. So let's examine who should and shouldn't use this artificial sweetener.

While it may be easy to spot the bogus claims, what about the latest findings regarding brain cancer? After all, it was published in a major journal. Well for starters, the study never said that aspartame "caused" brain cancer. It merely stated an observation. The actual study said that the incidence of brain cancer began increasing in 1984. In 1980, aspartame was approved for use in foods. As you can see, that's a magnificent leap of association. Wouldn't it be more likely that the incidence of brain cancer began increasing in the early 1980's because of advancements in technology and earlier detection?

Most people like sweets, and without a doubt you've encountered aspartame. I'm often asked if aspartame is harmful, or if it leads to brain disorders, seizures and learning disabilities. The fact is that aspartame is not as bad as some critics suggest. There are people that have a food sensitivity or allergic reaction to aspartame. But the degree of sensitivity is varied, and as with any sensitivity, the reaction could range from hives to headaches to more serious problems. These problems are real; but they are no different than sensitivity to tomatoes or milk. For obvious reasons, a person that has sensitivity to aspartame should avoid it. Unfortunately, critics like to insinuate that everyone reacts to aspartame and should avoid it. Yet, like the person that has an allergy to tomatoes or milk, should we issue an alert that tells everyone to not eat tomatoes or dairy products? Of course not.

The second group that should limit or avoid aspartame are those people that suffer from a syndrome called phenylketonuria, or otherwise known as PKU. PKU is an amino acid metabolism problem whereby the individual cannot properly metabolize the amino acid phenylalanine. Persons that suffer from this disorder develop extremely

high levels of phenylalanine in their blood stream which leads to brain damage and other complications. This disorder occurs at birth, is diagnosed early in life and dietary alterations are made for the individual. People with PKU have to avoid all foods that contain high levels of phenylalanine. Aspartame is made from two amino acids, one of which is phenylalanine, the other aspartic acid. It's not that PKU sensitive individuals have to avoid aspartame entirely. They simply have to account for it as part of their total daily intake. Make no mistake about it. This is a life threatening disorder. Pregnant women should avoid aspartame during pregnancy because no one can be sure whether their fetus could develop PKU. Critics contend that 25% of the U.S. population, about 4.5 million people, have one of the two genes necessary for PKU and although they do not develop the disease, they feel that these individuals may be sensitive to phenylalanine. This line of reasoning is flawed. Possessing one gene does not make a person susceptible to the same problems of PKU. In fact, both genes are necessary to develop problems metabolizing phenylalanine.

Like all amino acids, L-phenylalanine and L-aspartic acid are found abundantly within every high protein food we eat. When these two amino acids are joined together they create a compound that tastes like sugar but is 200 times sweeter. Aspartame contains just as many calories as all other sugars, 4 calories per gram, but because it is so sweet the amount required to sweeten foods is insignificant. Aspartame is now used in over 500 foods and the list is growing daily. It's used in ice creams, cookies, diet sodas, fat free sweets and beverages.

Aspartame critics focus on the way aspartame breaks down in the body. They claim that the breakdown of aspartame causes all kinds of health problems. When aspartame is heated or ingested, it breaks down and converts into methanol; it is then converted to formaldehyde, which then converts to formic acid. Formic acid is a known carcinogen and this is where the controversy and fear begins. While all those conversions may sound unnaturally natural, the fact is that many fruits and vegetables go through the same breakdown.

So researchers set out to find out if levels of methanol and formaldehyde were increased in the blood stream of aspartame users and if any discernible differences could be detected between subjects eating aspartame or not. Harvard Medical School, The University of Arizona College of Medicine, and The University of Michigan School of Public Health all concluded that: (a) there was no discernible differences in blood levels of methanol or formaldehyde in aspartame users versus non-users; (b) no link to seizures or hyperactivity were found; but (c) there was an elevation of the amino acid phenylalanine in the blood stream after being fed high dosages of aspartame (which was expected).



Skeletons In The Closet

Imagine that you, or someone you know, wanted to increase calcium intake by using an antacid. Sounds healthy enough. Now let's suppose that no one told you about the drug interactions, constipation, and malabsorption problems that could occur. How would you feel if your mother was wheeled into an emergency room in a coma from using an antacid because no one bothered to inform her that too much magnesium could result in death?

Well, recently the antacid manufacturers have been advertising their products as a "good source of calcium." Many of these products lack adequate warnings to the consumer, and women seem to be an easy target for this kind of advertising.

Women do need more calcium! It's a fact. It's harder for women to meet the RDA for calcium simply because so many women have either cut back on or omitted dairy products from their diet. Think about it. Do you get at least four to six servings of dairy products a day? More than likely you may have an occasional yogurt and a little skim milk on your cereal; but beyond that, most women just don't get enough calcium. On the other hand, maybe you are "lactose intolerant" and ingesting dairy products just isn't possible. No matter what, meeting the 800-1200 mg. requirement for calcium may not be that simple.

So, you decide to start taking supplements. After all, they don't contain any additional calories, are fat free, and definitely don't carry a cholesterol price tag like dairy products. While it is best to get what you need from food, supplements can at least give you some insurance against a diet lacking in dairy. But before you buy your next bottle of calcium, be forewarned that some are better than others and a few might actually be bad for you.

Recently, a number of antacids have developed marketing campaigns suggesting that antacids are a good source of calcium. While some do contain calcium, the question should be whether or not these are the best way to get your calcium? Using antacids poses a few concerns that you may want to be aware of. One problem with using an antacid as your source of calcium is figuring out exactly how much calcium you are actually getting. For example, the Tums label states that one dose provides 1,250 mg. of calcium carbonate; but, calcium carbonate is different from elemental calcium. In reality, 1,250 mg. of calcium carbonate provides only about 500 mg. of elemental calcium. In other words, out of 1,250 mg. Only 500 mg. is converted into an absorbable form. It doesn't matter how much calcium you take in, what matters is how much is bio-available to your body.

Consider the mixed message that you receive from advertisements about antacids being a good way to get calcium. The mixed message is that all antacids are a good source of calcium and that simply isn't the case. Although some do contain calcium carbonate, some do not. Antacid formulas made with magnesium hydroxide or aluminum hydroxide are not "terrific" sources of calcium. Antacids derived from magnesium hydroxide or magnesium carbonate often fail to provide adequate warnings about the antacid's effect on blood levels of magnesium, especially for people with kidney disease. If you have kidney disease, the mineral can accumulate in the blood and cause serious problems with blood pressure and your heartbeat. Antacids made from aluminum hydroxide actually rob the body of calcium and should not be taken by people with kidney disease. So, by being allowed to advertise antacids as being a good source of calcium, people may unknowingly assume any antacid will do the trick.

Perhaps one of the biggest mistakes of using an antacid as your source of calcium is how it affects your digestion. When you take an antacid, it reduces the acidity thereby making the stomach environment more alkaline. The

less acidic the stomach becomes, the less absorption of food stuff. Protein breakdown would suffer the most. So, while you may be getting some “calcium,” you may actually be reducing your ability to absorb other nutrients like amino acids, vitamins and minerals, especially copper. Antacids also decrease the absorption of the fat soluble vitamins A, D, E and K. Further, adequate amounts of vitamin D and magnesium are needed for efficient calcium absorption and most antacids don’t contain these nutrients. So, if you do not suffer from an acidic stomach, taking an antacid for calcium is unnecessary and may actually cause digestion problems. This is of particular concern to the elderly, who already face digestive problems and already tend to suffer from poor absorption. For them, taking an antacid just for “extra” calcium could prove to do more harm than good.

Another aspect that the label fails to warn consumers about is what can happen to the unabsorbed calcium. Calcium carbonate not absorbed by the body remains in the digestive tract and can lead to constipation, which is a common problem that women already face. So, while women do need extra calcium, it may be better to seek another form. Also, while “no sodium” may sound like an added benefit, the supplement may not bother to tell you that they contain a lot of sugar. Those that do contain sodium may contain very high levels. Sodium bicarbonate, which tames stomach acid very quickly, should be avoided by people with high blood pressure or congestive heart failure because a dose of Alka-Seltzer contains more than 1100 mg. of sodium.

You may actually want to avoid using antacids because they can affect the absorption of certain drugs and make them more or less effective. For example, the prescription drug Lanoxin, a heartbeat regulator, taken with an antacid will cause the drug to be less effective. You may also experience problems, if you are taking the antibiotic tetracycline, or any of the thiazide diuretics along with antacids. Other drugs that react with antacids are anti-ulcer drugs, Tagamet and Zantac, and Parkinson drugs like Levodopa. If you are on any type of medication, it would be wise to consult your doctor before taking an antacid.

With people cutting back so much on high fat dairy products like cheese, milk and cottage cheese, reaching the RDA for calcium has become very difficult, especially for women. The safety of some calcium supplements has been under question by the FDA for the last few years. Calcium carbonate, the type used in antacids, is manufactured from chalk or calcium hydroxide. Another form of calcium derived from oyster shell is often mined from fossilized limestone quarries or fresh oyster shells. In one major study of calcium supplements made from fossilized-shell and from dolomite, researchers discovered that fossil shell calcium contained very high concentrations of aluminum and lead. In fact, according to one study, ingesting the fossilized calcium carbonate in dosages that meet the RDA, a person would also be ingesting about 12 mg. of contaminants. That equals more than 5 times the normal dietary intake.

People who use bone meal may not be any healthier. The FDA issued an alert after discovering that bone meal contained high concentrations of lead. Calcium derived from horse and cattle bones contain lead due to environmental factors. The animals eat vegetation and breathe air from automobiles that once used leaded gas. With the phase out of leaded gasoline, lead levels have dropped; however, other environmental factors continue to be deposited on the land. To combat this, the FDA has set guidelines which allow a limit of 5 parts per million (ppm) in bone meal products. The U.S. Pharmacopoeia has set much more realistic guidelines at 3 ppm. Based on one study the highest levels of lead were found in bone meal, followed by fossil shell and then dolomite.

Given the potential for side effects of antacids, it’s wise to use them only if you actually suffer from too much gastric acid. So what are the alternatives to using antacids for calcium? And what type of calcium is best to take? First of all, look for calcium supplements that contain magnesium in a two to one ratio. For example, if the tablet contains 1,000 mg. of calcium, it should also contain 500 mg. of magnesium. Calcium works synergistically with magnesium and vitamin D and when combined together increases the absorption of the calcium. Calcium citrate and calcium gluconate are the best sources of calcium to use, particularly if they are chelated.

Always take your supplement with a meal, never on an empty stomach. Finally, use antacids for what they are intended for, an acidic stomach, and get your calcium from your diet or supplement wisely.

Foods That Are High In Calcium (and Low In Fat):

- *Low fat or no fat cottage cheese*
- *Low fat or no fat yogurt*
- *Low fat or no fat cheese*

Skim Milk

Calcium is also found in vegetables, but in somewhat small amounts. In addition, it would be hard to eat enough vegetables to meet your daily requirement. For example, mustard greens, broccoli and spinach are considered rich sources of calcium; however, a very small percentage of the calcium is actually absorbed because it tends to bind with oxalic acid and then is excreted.



SUMMARY

Could you put a dollar amount on how much your health is worth? Is it worth a hundred thousand dollars or millions of dollars? Would you spend everything you own to get it back if you absolutely had to? Would you have regrets about not taking care of your health sooner? Do you think cancer, heart disease and health problems can only happen to other people? The fact is that if you don't exercise, drink too much alcohol and eat

whatever you want, you will wish you had taken better care of yourself when you had the chance. Well, that chance is now. You can invest in health now, or invest in sickness later. So to avoid a life sentence of fatigue, medications and a walker or wheelchair, consider eating your way to good health.

Wouldn't it be nice if eating healthy and weight loss could be a pleasant experience for a change? Instead of feeling hungry, deprived, tired and constantly thinking about food, wouldn't it be wonderful to feel full of energy and love the process of getting lean and being healthy? I think weight loss and being healthy should be positive things that you do for yourself. This is the vision that I want to share with you throughout my Lean for Life course. By understanding a few simple coping skills you can avoid the most common mistakes that ruin your metabolism and cause failure every time. Let's just go over some of the most important things to remember.

16 of the Most Important Steps to Achieving Success

1. *Take a non-dieting approach to weight loss. Think about the changes that you are making as a way of life, not as a "diet."*
2. *Most people fail because they don't understand how certain high risk situations affect them. Here are just two of the most common high risks. First, do not let yourself get hungry. The moment you get hungry it doesn't matter what you know about food, you'll eat everything in sight. Secondly, do not leave home without food. By not carrying food with you every day, there's very little hope that you will ever be successful.*
3. *Make sure your food tastes incredible. If I ate bland, boring, low fat foods, I'd want to eat Mexican food everyday too.*
4. *If you slip and have a flat tire, don't slit the other three!*
5. *Make exercise part of your life again. When we were kids we called it playing. As adults we call it boring. Have you lost your inner child?*
6. *Think about making Better Bad Choices™.*
7. *You don't have to cook every day. Try this little tip. Cook on Sunday nights and Wednesday nights. Cook enough great tasting food so you have leftovers. Use the Healthy Chef Cookbook and locate the Shrimp Jambalaya. If you cook it on Sunday night, you'll have leftovers for Monday and Tuesday. Wednesday night cook a turkey breast meatloaf. Now you can have meatloaf sandwiches for Thursday and you can place the meatloaf over a bed of rice for Friday. Now, pick two other recipes and do the same the next week.*
8. *Do not focus on the grams of fat. Make sure most foods are under 20% fat. Remember the fat formula. Calories from fat divided by the total calories = % fat (just drop the decimal point).*
9. *You may eat low fat, but if you are eating too much sugar, you won't lose weight and you won't be healthy. To determine the teaspoons of sugar within a food, locate the grams of sugar and divide the grams by 4.*

10. *Limit your alcohol consumption to once a week. Don't forget, alcohol is not only a depressant; but three glasses of wine, three lite beers, or three shots of 100 proof alcohol contain the equivalent of 19 1/2 teaspoons of sugar.*
11. *Do not allow yourself to get hungry. If you bring food for lunch, bring extra to eat mid-afternoon. By eating smaller, more frequent meals you will have more control over food.*
12. *Look at your hand. When you have a piece of low fat, high quality protein like fish, chicken or turkey breast it should be the size of your whole hand. When you eat a complex carbohydrate it should be about the size of your fist.*
13. *You are doing great if you find yourself making more positive food selections even if those food selections fall short of being perfect.*
14. *If a weight loss product or supplement sounds too good to be true, it probably is.*
15. *Although diet pills and bizarre eating rituals may sound fast and easy, they end up causing you to gain more weight and lose your health in the long run.*
16. *You need to eat to increase your metabolism and lose weight. You have to eat to have more energy. You have to eat to avoid hunger. You have to eat to focus and think clearly. You have to eat to live. So why do most diets like the grapefruit diet, cabbage soup diet and the likes sound like a good thing?*

Bruce Lee once said, "use what's useful." I hope you found this book in some way useful on your quest for the truth about food, supplements and whatever you were seeking when you purchased Beyond Diet. If you would like to learn more then visit my website at www.eatingmanagement.com. I can offer you more dynamic things like nutritional counseling services, CD's, cookbooks, podcast, and my personal vitamin packets. Thank you for taking the time to read Beyond Diet.

Respectfully,

A handwritten signature in blue ink that reads "S. K. Klein" followed by a stylized "MD" or "CN" monogram.

Keith Klein, CN, CCN

